



University
of Glasgow



HEALTH ECONOMICS AND HEALTH TECHNOLOGY ASSESSMENT

ANNUAL REPORT 2024

From the Director



It is with great pleasure that I introduce the Health Economics and Health Technology Assessment (HEHTA) Research Group's Annual Report for 2024. This year, as we settled into our new home at the Clarice Pears Building, we also celebrated a remarkable period of collaboration and achievement.

Our research portfolio saw exciting expansions into new areas, including one health and planetary health research, which is also one of the key areas of strategic research focus for our College of Medical, Veterinary & Life Sciences. Dr Katherine Simpson's *Rapid Engagement with Stressed Peatland Environments and Communities in Transformation (RESPET)* project is one such example. The *RESPECT* project is a One Health initiative, that brings together expertise in economics, environmental geography, ecology, law, and archaeology to explore how land use change can help achieve net zero goals. We look forward to sharing our progress in the years ahead.

Aligning with our expanding research portfolio, we have made some exciting changes to our MSc programme, which has been revamped as *MSc Health Economics and Health Technology Assessment*. Over the next two years, we'll be introducing new modules, the first of which on 'Research Methods in Health Economics and HTA' will be launched in September 2025.

As always, our people are at the heart of HEHTA. This year, we celebrated the promotion of Dr Robert Heggie, Martin Taylor-Rowan, and Katherine Simpson to Research Fellows, in recognition for their expertise in economic evaluation alongside clinical trials, evidence synthesis, and one health. Dr Nurnabi Sheikh was promoted to Research Associate, in recognition for his expertise in system dynamics modelling, and Dr Evi Germei was promoted to Reader, in recognition for her leadership in qualitative research in HTA. We also congratulate our PhD graduates: Drs Ryan Field, Lili Wei, Lisong Zhang, and Francesco Manca.

I am also delighted to announce Professor Emma McIntosh has agreed to take on the role as Co-Director of HEHTA. Professor McIntosh has been Deputy Director of HEHTA since 2015. She has been instrumental in shaping HEHTA into a research group that nurtures early careers and drives bold ambitions in delivering high-quality and impactful research. I now invite her to share a few words of introduction to that role.

I am delighted to be named Co-Director of HEHTA. We look forward to continuing to innovate and collaborate with our exceptional team at HEHTA towards our ambition of becoming the world-leading centre for research and education in working to improve health and wellbeing through better decision-making.



A handwritten signature in black ink, appearing to read 'Emma McIntosh'.

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Research Themes

Analysis of Linked Health Data (ALDA)

Analysis of Linked Health Data (ALDA) encompasses all research at HEHTA that is associated with statistical, epidemiological, and economic analysis of linked health data sets. HEHTA has a wealth of expertise and experience in this field, including data manipulation and identifying cohorts within linked data sets; regression modelling of panel data sets; outcome measurement and costing; and developing decision analytic models using linked data sets.

Decision Analytic Modelling and Simulation for Evaluation in Health (DAMSEL)

Decision Analytic Modelling and Simulation for Evaluation in Health (DAMSEL) refers to research involving evaluation with modelling or simulation methods. Modelling can be used as the whole framework for an evaluation or as part of a clinical trial-based evaluation to extrapolate intermediate trial endpoints to final health economic outcomes. DAMSEL cuts across and interacts with many of the other themes of HEHTA.

Economics of Population Health (EPH)

Economics of Population Health (EPH) encompasses methodological and applied research on the economic evaluation of population health interventions and includes interventions tackling the wider determinants of health delivered out-with conventional health services. This theme looks closely at the evaluation of “up-stream” factors affecting health and wellbeing, such as early life experiences; the social and economic conditions in which people live; and environmental exposures. The theme also considers the complexity often involved in design and evaluation.

Economic Evaluation alongside Clinical Trials (EEACT)

Economic Evaluation alongside Clinical Trials (EEACT) covers all research conducting an economic appraisal as part of a clinical and/or complex interventions trial. Although modelling methods may still be required to provide a comprehensive appraisal, the characterising feature of this theme is the inclusion of an economic component to the trial and the availability of experimental data on both costs and effects of treatment.

Incorporating Perspectives and Experiences (IPE)

Incorporating Perspectives and Experiences (IPE) research focuses on the development and application of qualitative methodologies to conceptual modelling; trial recruitment and design; developing measures; evidence synthesis; identifying attributes and levels for stated preference discrete choice experiments; and process evaluation. IPE aims to promote the use of qualitative approaches in HTA by championing the valuable insights it can offer into stakeholder perspectives, needs, and experiences, as well as contextual aspects of evaluations and HTA.

Global HTA (GHTA)

Global HTA considers HTA in different contexts, exploring variation between high-income countries as well as looking in-depth as to how and why decision-making in healthcare may differ amongst low- and middle-income countries. Given the global reach of HTA, different methodological approaches and decision-making processes are considered. This theme draws upon HEHTA’s research from a global perspective, working with partners including international health and development institutions; global HTA agencies; and major global health research funders - as well as utilising faculty expertise in delivering training in HTA beyond the UK.

Evidence Synthesis (ES)

Evidence Synthesis encompasses all research work associated with combining multiple sources of evidence for clinical and economic evaluations. Alongside the Complex Reviews Synthesis Unit (CRSU), this research theme explores challenges in combining complex data types and structures through both methodological and applied work. Our research ranges from rapid reviews without quantitative synthesis for policy briefings to extensive research programmes of complex living systematic reviews that require the adoption of novel and sophisticated methodological approaches in identifying and synthesising different types of data.

Economics of Precision Medicine (EPM)

Economics of Precision Medicine (EPM) categorises research that is methodologically underpinned by subgroup analyses and which focuses on the understanding of the “strata” of responses, the genetics of the diseases, and effective and cost-effective forms of treatment for different patient groups. In addition, EPM also investigates the implications of precision medicine for study design and technology pricing.

Theme Spotlight: EEACT



Economic Evaluation alongside Clinical Trials (EEACT) Spotlight

2024 has been busy for the EEACT theme, with 24 live projects, including 10 new projects which have started this year. EEACT covers all research conducting an economic appraisal as part of a clinical and/or complex interventions trial. Our projects are typically multidisciplinary, where we lead the design, development and analysis of the economic components which are embedded in mixed methods collaborative grants. The research is funded from a wide range of organisations including NIHR, Chief Scientist Office, UKRI and Wellcome Trust as well as charities such as the British Heart Foundation.

Exciting new projects include the £1.9 million UKRI funded Partnership for Change study, which is a coproduction randomised controlled trial of Infant, Parent Support (IPS) to improve the mental health of children with family support services. Professor Kathleen Boyd will lead the economic evaluation

on this complex intervention over the next three years. Dr Nicola McMeekin is leading the economic evaluation on the CSO funded BEATIT2 study, exploring Behavioural

Activation for depression in adults with severe learning disabilities. The British Heart Foundation have funded a £1million UK-wide interdisciplinary study on angina after percutaneous coronary intervention (PCI), a condition affecting 20-40% of patients. Professor Olivia Wu and Dr Robert Heggie will lead the economic evaluation of a systems approach to inform downstream strategies. The research aims to understand the mechanisms of persistent angina and evaluate new diagnostic tools, such as cardiovascular magnetic resonance imaging, for their potential to improve patient outcomes and potentially reduce NHS costs.



Professor Kathleen Boyd

While these exciting new projects have kicked off in 2024, some long-term projects have also finished and published their results. The NIHR funded BeST? Services Trial - a UK based RCT exploring an intensive intervention aiming to improve family functioning and child mental health of children in foster care- came to an end. Dr Manuela Deidda with Professors Kathleen Boyd and Emma McIntosh have published their economic analysis of this complex intervention to improve the mental health of maltreated children in foster care. Professor McIntosh led the economic component of the CSO funded Tailored Intervention at home for patients with moderate-to-severe COPD and Co-morbidities by Pharmacists and Consultant Physicians. This feasibility study and process evaluation indicated positive patient and healthcare professional experiences and the intervention's feasibility. Future research will use the pilot data, including economic findings, to assess progress towards a definitive large-scale RCT.

Research Spotlights

Research Spotlight 1: Incorporating Implementation Considerations

Dr Robert Heggie, Research Fellow

Delayed or insufficient implementation of clinically effective and cost-effective health technologies leads to poorer health outcomes for patients and the sub-optimal use of scarce resources for national health services. Many potential barriers to implementation may exist, such as additional set-up costs, workforce requirements, adjustment of clinical pathways, and relevance of available evidence. When we fail to consider how a health technology will be implemented, we only have a partial understanding of the full costs and benefits of a health technology when delivered in routine practice. Methods are available which can allow us to incorporate implementation. However, implementation is not commonly considered within the economic evaluation of health technologies.

Robert undertook his PhD on the topic of “Incorporating implementation within the economic evaluation of health technologies”. He used his PhD to review both how to identify how this challenge has previously been approached by researchers and to map out what methods are currently available for researchers working in this space. He then applied some of the methods he had identified to the economic evaluation of two clinical trials where implementation had been identified as a potential challenge.

In June 2024, Robert was invited to a workshop in Warwick, UK, which brought together both health economists and implementation scientists interested in bridging the gap between their two disciplines. This workshop led to the development of a commentary article which is a call to arms for researchers, funders, and reimbursement agencies to recognise the

importance of considering implementation alongside economic evaluation in the assessment of health technologies.

Building on from the workshop, Robert has now created a special interest group on economic evaluation and implementation within HTA which will be hosted by the Health Services Research (HSR) UK conference. This will bring together researchers from all around the world and serve as a focal point for both researchers and decision makers interested in developing methods and driving change. The group will hold their inaugural meeting in July 2025 in Newcastle, UK. There are also discussions underway to develop a similar group at the Health Services Research Association of Australia & New Zealand to expand the network.

Robert and colleagues from the group will also be participating in a panel discussion for consideration at the International Health Economics Association (iHEA) conference in July 2025 in Bali, Indonesia. This follows on from the success of a similar panel discussion with researchers and policy makers in Utrecht, The Netherlands, in 2022.

Robert is also a co-applicant on an NIHR Team Science grant proposal led by Carlos Sillero-Rejon (University of Bristol) which aims fund the development of a team of researchers interested in economic evaluation and implementation. The purpose of the grant will be to develop the team and prepare the groundwork for a larger NIHR grant which would allow the team to develop further methods and guidance on this topic.



What methods are currently available for incorporating implementation considerations within the economic evaluation of health technologies? A scoping review

Background

When clinically effective, cost-effective health interventions are not fully implemented in clinical practice, population health suffers. Economic factors are among the most commonly cited reasons for suboptimal implementation. Despite this, implementation and economic evaluation are not routinely performed in conjunction with one another. This review sought to identify and describe what methods are available for researchers to incorporate implementation within economic evaluation, how these methods differ, when they should be used, and where gaps remain.

Methods

The study conducted a scoping review using systematic methods, and a pearl-growing approach was used to identify studies. References and citations were identified using Web of Science and SCOPUS. Any study that contained terms relating to economic evaluation or a series of implementation-related terms in the title or abstract was included for review. The search was conducted and validated using two independent researchers.

Results

The review identified 42 unique studies that included a methodology for combining implementation and economic evaluation. The methods identified could be categorised into four broad themes: policy cost-effectiveness approach (11 studies); Value of Information and Value of Implementation approach (16 studies); mixed methods approach (6 studies); and costing approach (9 studies). A trend over time was identified from methods that adopted the policy cost-effectiveness approach to methods

that considered the trade-off between the Value of Information and Value of Implementation. More recently, mixed method approaches to incorporate economic evaluation and implementation have been developed, alongside methods to define, measure, and cost individual components of the implementation process for use in economic evaluation.

Conclusion

The review identified a range of methods currently available for researchers who consider implementation alongside economic evaluation. No single method or tool is said to incorporate all the relevant issues to fully incorporate implementation within an economic evaluation. Instead, there are a suite of tools available, each of which can be used to answer a specific question relating to implementation. Researchers, reimbursement agencies, and national and local decision-makers need to consider how best to utilise these tools to improve implementation.

Citation

Heggie, Robert (2023) *Incorporating implementation within the economic evaluation of health technologies*. PhD thesis.

Heggie, R., Boyd, K., Kamaruzaman, H. et al. What methods are currently available for incorporating implementation considerations within the economic evaluation of health technologies? A scoping review. *Health Res Policy Sys* 22, 134 (2024).



Research Spotlight 2: RESPECT - Rapid Engagement with Stressed Peatland Environments and Communities in Transformation

Dr Katherine Simpson, Lecturer in One Health and Environmental Economics



The ecological and climate crises are among the most pressing global challenges of our time. Degraded ecosystems, rising emissions, and unsustainable land use not only drive biodiversity loss and climate change, but also threaten food security, water quality, mental and physical health, and our communities' ability to recover from difficulties. In this context, restoring the health of our landscapes can be considered a public health priority — and an essential part of building a more sustainable future.

Peatlands, though often overlooked, are one of the world's most important ecosystems. They support biodiversity, regulate water flows, and are one of the largest terrestrial stores of carbon. However, over 80% of UK peatlands are currently damaged or degraded. Rather than acting as carbon sinks, they have become significant sources of greenhouse gas emissions, harming the UK's efforts to meet its net zero targets. Their deterioration also threatens water quality, increases flood risk, and damages the natural infrastructure that supports wellbeing in rural and urban areas alike.

The Rapid Engagement with Stressed Peatland Environments and Communities in Transformation (RESPECT) project is a new interdisciplinary initiative addressing these interlinked ecological, economic and social challenges. Funded by UK Research and Innovation (UKRI) through its Land Use for Net Zero Research Programme, the project brings together researchers from the Universities of Glasgow, Newcastle, Hull, and Stirling with expertise in law, ecology, economics, archaeology, and environmental geography. At its core, RESPECT is a One Health initiative, working across ecological, economic, and social systems to deliver co-benefits for people and planet.

Katherine Simpson is leading the economics workstream within the project and is building on her previous economic-ecological modelling framework for land management and biodiversity policy in England and Scotland, such as “Economic incentives for woodland creation on farmland: Modelling the impacts on biodiversity” spotlighted below. In RESPECT, Katherine leads work on evidencing how new incentive mechanisms, ranging from public subsidies to private finance, can support more effective, inclusive, and equitable peatland restoration. A central strand of the project uses spatial modelling to test how different policy scenarios affect landscape-scale outcomes. This applies not just to peatland condition, but also to other ecological indicators and public goods, such as carbon storage, water quality, and biodiversity. These models are also designed to assess the social outcomes of land use change. Changing land use can affect community access to land, as well as cultural relationships with landscapes and traditional practices. By integrating a one-health economics perspective, the RESPECT project helps quantify and understand these impacts — particularly how land use change contributes to or detracts from collective wellbeing.



A second aspect of Katherine's research focuses on behavioural insights. Using discrete choice experiments, RESPECT is gathering data on the preferences of landholders, including farmers, crofters, and estate managers, regarding restoration schemes, financial incentives, and governance models. At the same time, the project is exploring how the public responds to these initiatives, both in directly affected communities and across the wider Scottish population. These findings will illuminate how social histories, such as the legacy of the Highland Clearances, and contemporary issues of ownership, access, and community value shape support for environmental change.

Together, RESPECT brings a planetary health perspective to land use transformation. The project will produce data, tools, and governance recommendations, including a Peatland Triage Tool to help landowners prioritise restoration based on ecological and social criteria. It will also examine the institutional and policy shifts required to support long-term, sustainable change.

By recognising the deep interconnections between ecological, economic, and social systems, RESPECT aims to support land management that works not only for carbon and biodiversity, but also for the wellbeing of communities and future generations. As the UK speeds up its move to net zero, projects like RESPECT demonstrate how restoring nature can be at the heart of a healthier, fairer, and more resilient society.

Economic incentives for woodland creation on farmland: Modelling the impacts on biodiversity

Background

Planting more woodland is an important part of the UK's climate and biodiversity strategies. Since most UK land is currently used for farming, encouraging woodland creation means persuading farmers to change how they use their land — often through financial incentives. However, where new woodland is planted, and how beneficial it is for nature, can vary widely. This study explores how economic incentives for farmers could lead to changes in land use, and what this might mean for wildlife.

Methods

The study combined economic and ecological modelling to explore two key questions: how do different payment levels affect farmers' decisions to plant woodland, and what impact might this have on local bird populations? The team looked at two areas, one in Scotland and one in England, and used data on land quality, current land use, agricultural profits, and bird count data. They focused on three familiar bird species and estimated how likely these birds were to appear in different landscapes, depending on how much new woodland was created nearby.

Results

Higher payments to farmers led to more land being converted to woodland, which in turn helped increase bird presence — but the size of this effect varied

across species and between the two areas. In the Scottish case study, the land that was cheapest to convert also tended to be best for birds, meaning incentives went further. In the English case, the opposite was true: the land with the most ecological benefit was also the most productive for farming, making it more expensive to convert. This mismatch reduced the efficiency of the incentives.

Conclusion

Financial incentives can encourage woodland planting and benefit wildlife, but their success depends on where the land is, how it's currently used, and how ecologically valuable it is. To get the best value for money, both economically and environmentally, policymakers need to think carefully about how land value and conservation potential vary across regions. This study shows that more targeted approaches, guided by data, can help make environmental policies more cost-effective.

Citation

Nthambi, M., Simpson, K., Bradfer-Lawrence, T., Dobson, A., Finch, T., Fuentes-Montemayor, E., Park, K., Watts, K. and Hanley, N. (2024) Economic incentives for woodland creation on farmland: Modelling the impacts on biodiversity. *Ecological Economics*, 224, 108265. (doi: 10.1016/j.ecolecon.2024.108265)

Research Spotlight 3: BeatIt2: Behavioural Activation for Depression with Severe Learning Disabilities

Dr Nicola McMeekin, Research Associate

People with severe learning disabilities (SLD) are no less likely to suffer from depression than the general population. In fact, studies even suggest that those with SLDs are at an increased risk.

Adults with SLDs face greater challenges in communication and daily functioning compared to those with mild learning disabilities, who may manage more independently and with less support. As a result, many of the existing treatments available for depression, such as cognitive behavioural therapy (CBT), are not suitable for those with SLDs, as they rely on a level of verbal or cognitive engagement not always accessible. Despite this, there is a lack of research into alternative, more appropriate therapies for depression which cater for differing needs. Behavioural Activation (BA) is a type of psychological therapy which enhances an individual's mood by encouraging their re-engagement in activities that are meaningful to them, such as sensory experiences, socialising, arts, or sports, making it a promising approach to investigate for adults with SLDs.

BeatIt2 is a solutions-focused research project, funded by the Chief Scientist Office, under their Health Improvement, Protection, and Services Research Committee. This research project, which began in November 2024, is a continuation of the first BeatIt project, which explored the feasibility of BA within the context of adults with mild learning disabilities and the first BeatIt2 feasibility study which

was negatively impacted by the Covid-19 pandemic (see Gillooly et al. below). The current BeatIt2 looks to progress the research through a new feasibility study, exploring the possibility of a new research project examining whether behavioural activation works for depressed adults with SLDs.

Nicola McMeekin is part of the BeatIt2 team and is leading the health economics work. Nicola is using her expertise in feasibility studies to assess the feasibility and acceptability of collecting data to inform an economic evaluation in a potential future full trial.

The group will investigate the feasibility of recruiting 50 adults with SLDs and assessing their willingness to be randomly placed into either a BA group or receive standard care from mental health or social services. The project is expected to conclude in the second half of 2026, with results published in a research paper.

If successful, BeatIt2 could pave the way for more inclusive mental health care practices — offering hope to adults with SLDs and their carers and families. It would also expand HEHTA's scope for further research into both learning disabilities and mental health.



Behavioural activation for depressive symptoms in adults with severe to profound intellectual disabilities: Modelling and initial feasibility study

Background

Almost no research has been published reporting on evaluations of the effectiveness of psychological interventions for people with severe to profound intellectual disabilities and depression. This paper describes the development and initial feasibility testing of an adapted Behavioural Activation therapy (BeatIt2) for this population.

Method

Phase 1 of the study examined participant recruitment and willingness to be randomised in the context of a planned Randomised Controlled Trial (RCT). Phase 2 examined the feasibility of delivering the intervention.

Results

20 adults with a severe or profound intellectual disability and clinically significant depression were recruited to Phase 1 of the study. In Phase 2, there was 100% participant retention for those recruited to the study at 6-month follow-up. The BeatIt2 therapy was reported to be acceptable for participants.

Conclusion

COVID disruption meant that it was not possible to complete the planned feasibility RCT. The positive findings suggest that additional evaluation of BeatIt2 is warranted.

Citation:

Gillooly A, Dagnan D, Hastings R, Hatton C, McMeekin N et al. Behavioural activation for depressive symptoms in adults with severe to profound intellectual disabilities: Modelling and initial feasibility study. *Journal of Applied Research in Intellectual Disabilities*. 2024 Mar;37(2):e13197.



Project Tables

Completed in 2024

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
Real world treatment effectiveness in people with type 2 diabetes	David McAllister	2020-2024	463,904	MRC	ES
Tailored Intervention at home for patients with moderate-to-severe COPD and Co-morbidities by Pharmacists and Consultant Physicians	Emma McIntosh	2021-2024	297,984	CSO	EEACT
Preventing Homelessness, improving health for people leaving prison: a pilot randomised controlled trial of a Critical Time intervention (PHaCT)	Jim Lewsey	2022-2024	145,198	NIHR	ALDA, EPH
TIPS2 Staying smokefree: Maximising the public health benefits of smokefree prisons	Kathleen Boyd	2021-2004	577,194	NIHR	DAMSEL

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
The Best Services Trial (BeST): Effectiveness and cost-effectiveness of the New Orleans Intervention Model for Infant Mental Health	Kathleen Boyd Emma McIntosh	2016-2024	3,878,068	NIHR	EPH, DAMSEL
The clinical utility of cardiac magnetic resonance imaging in patients with angina but no obstructive coronary disease (CorCMR): a diagnostic study and nested randomised trial.	Olivia Wu	2021-2024	295,003	BHF	EEACT
Optimising a Digital Diagnostic Pathway for Heart Failure in the Community (AZ OPERA)	Olivia Wu	2022-2024	768,000	NHSGGC	DAMSEL

New in 2024

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
Understanding problematic polypharmacy in people with diabetes	David McAllister	2024-2029	311,926	DiabetUK	ALDA
Kidney function as a modulator of cancer treatment	David McAllister	2024-2029	1,119,039	Wellcome	ES
CHIESIUK. Translingualism Curiosity Grant	Emma McIntosh	2024-2025	60,074	CHIESIUK	EEACT
Economic analysis of real-time viral genomics as a tool for infection prevention and control (HIS-MRG)	Emma McIntosh	2024-2027	96,727	Healthcare Infection Society	EEACT
CSO Overdose Response Teams evaluation grant	Jim Lewsey	Jim Lewsey	352,354	CSO	ALDA
COAST R - COastal Communities And SeasTogether for Resilience Network Plus	Katherine Simpson	2024-2028	162,928	UKRI	IPE
Rapid Engagement with Stressed Peatland Environments and Communities in Transformation. [RESPECT]	Katherine Simpson	2024-2027	3,761,183	UKRI	IPE

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
<p>RESANTH - : Resilience of Anthropocene Coasts and Communities (ResAnth): assessing and responding to urban and post-industrial coastal risks</p> <p>Start date: April 2024, duration 42 months. Again, no award letter yet. Lead Queen Mary, University of London.</p>	Katherine Simpson	2024-2027	3,066,444	UKRI	IPE
Evaluating the Impacts of Good Quality Housing	Kathleen Boyd	2024-2025	74,190	PHS	ES
INVEST feasibility RCT sleep restriction therapy for newly diagnosed breast cancer patients with acute insomnia	Kathleen Boyd	2024-2025	299,058	CSO	EEACT
Partnership For Change (UKRI) Phase III. Addressing intergenerational geographical inequalities through place-sensitive infant mental health provision to struggling families	Kathleen Boyd	2024-2027	1,927,868	UKRI	EEACT
Improving Trial Applicability in Real World setting with limited individual patient data	Lili Wei	2024-2025	11,200	Carnegie Trust	ALDA
UKHSA Cost effectiveness analysis of health protection interventions for Inclusion Health populations	Manuela Deidda	2024-2025	280,402	UKHSA	DAMSEL
Aligning active travel and mass transit for the Clyde Metro Project in Glasgow	Manuela Deidda	2024-2025	45,103	NERC	EPH
A digital parent skills training programme for parents of children with intellectual disabilities Acceleration Award – adaptation and assessment of digital technologies for social care (BeatIt) Stepping stones	Nicola McMeekin	2024-2024	199,467	NIHR	EEACT

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
BEATIT2 - Behavioural Activation For Depression In Adults With Severe Learning Disabilities. A Feasibility Randomised Controlled Study Of Behavioural Activation With Treatment As Usual (TAU) Vs TAU Alone	Nicola McMeekin	2024-2026	300,000	CSO	EEACT
Angina after PCI: systems medicine to inform downstream strategies	Olivia Wu Robert Heggie	2024-2029	1,081,035	BHF	DAMSEL
CROSS sectional imaging in patients with recent onset Heart Failure (CROSSHF)	Olivia Wu Robert Heggie	2024-2030	1,955,044	NIHR	EEACT
Metalnsight and CINeMA: Reproducible evidence for clinical decision-making	Olivia Wu	2024-2026	380,336 USD	Wellcome Trust	ES

Ongoing in 2024

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
Creation of a standardised protocol tool and eLearning programme	David McAllister	2023-2025	119,015	CIHR	ALDA
Randomised Controlled Trial Of A Facilitated Home-Based Rehabilitation Intervention In Patients With Heart Failure With Preserved Ejection Fraction And Their Caregivers: The REACH-HFpEF Trial (REACH HF)	Emma McIntosh	2021-2026	2,194,906	NIHR	EEACT
Equally safe at School: Whole-school approach to addressing Gender-Based violence in secondary school	Emma McIntosh	2023-2026	1,626,932	NIHR	EPH
GALLANT (NERC Strategic Programme Call)	Emma McIntosh	2022-2027	10,166,893	NERC	EPH

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
Impact Accelerator Grant 'The Global Gambling Control Monitor: integrating multi-sectoral policy responses into gambling control systems'	Emma McIntosh	2023-2025	402,184	UK Government /Gambling Commission	EPH
PERFORM: Personalised Exercise-Rehabilitation FOR people with Multiple long-term conditions (multimorbidity)	Emma McIntosh	2022-2027	2,577,534	NIHR	EPH
QUEST: Quantum-Inspired imaging for Remote monitoring of Health & disease in community healthcare (Bio - Healthcare 2050)	Emma McIntosh	2021-2026	4,713,164	EPSRC	EPM, EPH
Right 4 burns: A multidisciplinary program for burns management, treatment and prevention in low income countries	Emma McIntosh	2022-2026	3,347,670	NIHR	GTHA
SUPPORTING MUMS (SMS 2)Effectiveness and cost effectiveness of an automated text message intervention for weight management in postpartum women with overweight or obesity	Emma McIntosh	2021-2025	2,563,509	NIHR	EPH
Tailored Intervention at home for patients with moderate-to-severe COPD and Co-morbidities by Pharmacists and Consultant Physicians (PCP TICC)	Emma McIntosh	2021-2025	297,984	CSO	EEACT
Evaluating Public Health Interventions Using Non-Randomised Study Designs: Thrombectomy Service And Police Carriage Of Naloxone	Jim Lewsey	2022-2025	288,749	CSO	ALDA
A global study to evaluate the potential benefit of adjuvant chemotherapy for small bowel adenocarcinoma. BALLAD	Kathleen Boyd	2013-2025	686,749	CRUK	EEACT

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
A phase II RCT to measure the cost and consequences of Dyadic Developmental Psychotherapy compared with 'usual treatment' for children referred with maltreatment-associated psychiatric problems DDP / RIGHT	Kathleen Boyd	2020-2025	2,563,417	NIHR	EEACT, DAMSEL
Feasibility RCT sleep restriction therapy for newly diagnosed breast cancer patients with acute insomnia INVEST	Kathleen Boyd	2023-2025	299,058	CSO	EEACT
Scottish Medicine Consortium reviews	Kathleen Boyd	2019-2026	192,000	SMC	ES, DAMSEL
STOPPIT3: A Randomised Placebo-Controlled Trial of Antenatal Corticosteroids for Planned Birth in Twins	Kathleen Boyd	2021-2025	1,894,258	NIHR	EEACT, DAMSEL
A pilot cluster randomised controlled trial of the Go2play active play intervention for children with intellectual disabilities (GO2PLAY)	Manuela Deidda	2023-2025	110,000	Bailey Thomas	EPH
Effectiveness of Surveillance Technologies to Prevent Suicides in High-Risk locations	Manuela Deidda	2023-2026	1,120,196	NIHR	EPH
Integrated Technologies for Improved Polyp Surveillance (INCISE) V2.0	Neil Hawkins	2023-2025	1,205,350	UKRI	EPM
Radical	Neil Hawkins Olivia Wu	2023-2025	214,191	NHSGGC	EEACT, DAMSEL
Healthy Dads Healthy Kids in prisons: a feasibility study and pilot for an intervention to improve father child relationships (HDKK)	Nicola McMeekin	2022-2025	438,794	NIHR	EPH
A pilot randomised control trial of an intervention to reduce children's exposure to second-hand smoke in the home in disadvantaged communities in Scotland	Nicola McMeekin	2023-2025	297,302	CSO	EPH

Project Title	HEHTA Lead(s)	Duration	Total Project Value (£)	Funder	Research Theme(s)
A Stop Smoking in Schools Trial (ASSIST Global)	Nicola McMeekin	2022-2025	351,026	MRC	EPH
Accelerated cardiovascular magnetic resonance in coronary artery disease (MRI in CAD)	Olivia Wu	2021-2025	247,507	NIHR	EEACT
Oxybutynin for the treatment of vasomotor symptoms associated with menopause (BLUSH)	Olivia Wu	2022-2027	1,973,257	NIHR	EEACT
Optimal implementation of woolbachia wAlbB programmes for Dengue control (MOSQUITO)	Olivia Wu	2022-2027	4,999,582	Wellcome Trust	EEACT, DAMSEL, GHTA
Early Supported Discharge in patient admitted to hospital with Heart Failure; ESD-HF	Olivia Wu	2020-2025	519,122	SQ innovation AG	DAMSEL
Evidence Synthesis Group	Olivia Wu	2023-2028	3,750,000	NIHR	ES
EVIS-Early Vasopressors in Sepsis	Olivia Wu	2021-2026	3,077,443	NIHR	EEACT, IPE
Coronary Microvascular Angina International: A multicentre, randomised controlled trial (iCORMICA)	Olivia Wu	2020-2027	1,383,187	Abbot Industries	EEACT
Living Lab: Driving Economic Growth in Glasgow through Real-World Implementation of Precision Medicine	Olivia Wu, Neil Hawkins	2020-2025	38,046,472	UKRI	EPM
BCIS4 A multicentre randomised trial of surgical versus percutaneous revascularisation of ischaemic left ventricular dysfunction in the United Kingdom, with embedded internal pilot and health economic analysis	Olivia Wu Robert Heggie	2023-2032	287,915	NIHR	EEACT
AF Screening to Prevent Stroke – the Role of Blood, ECG and Genetic Biomarkers (ASPIRE)	Robert Heggie	2023-2025	151,884	Stroke Association	DAMSEL

Highlights of 2024

Co-Directorship Announced

Professor Emma McIntosh was appointed as Co-Director of HEHTA in March, building on her almost 15 years of experience with the team. She now shares directorship of HEHTA with current director Professor Olivia Wu in a move that aims to better reflect their existing collaborative approach to leadership.

Emma joined HEHTA in May 2011 as Reader in Health Economics and Programme lead on the Economics of Population Health theme. Most recently, she served as deputy director of HEHTA, where her notable impact includes her work as Principal Investigator and Director of the NIHR Global Health Research Group on estimating the Prevalence, Quality of life, Economic and Societal impact of arthritis in Tanzania. Emma was also recently announced as Deputy Head of the School of Health and Wellbeing, a role that reflects the value and reach of her expertise. Her leadership in these roles not only strengthens HEHTA's strategic direction but also enhances the school's ability to drive meaningful research and policy advancements in health and wellbeing.

Kathleen Boyd Appointed to SMC

We were delighted to announce that Kathleen Boyd, Professor of Health Economics and Director of Research at the School of Health & Wellbeing, was appointed to the Scottish Medicines Consortium (SMC) in October. The SMC are the national source of advice on the clinical and cost effectiveness of all new medicines for NHS Scotland, working to ensure that people nation-wide have timely access to medicines that provide the most benefits based on the best available evidence. As a voting member, Kathleen joins a national decision-making committee, further developing HEHTA's existing scope of influence in national health and wellbeing decision making.

New Fields of Research

We are always looking to build on our areas of expertise and explore new research contexts by embracing the new challenges and opportunities in health economics and health technology assessment. Grants received in 2024 have seen us move into the fields of infectious diseases, housing and public health, and sustainability to name but a few. As our expertise expands, our base of knowledge and impact grows — helping us better address the complex and evolving needs of HE and HTA globally.

Named as Hosts of HESG's Summer Conference 2026

We were proud to be named hosts of the Health Economists' Study Group (HESG) summer conference 2026. HESG's conferences take place bi-annually in summer and winter, providing a regular forum for economists, researchers, and policymakers to discuss new research and developments in health economics. Our executive committee has been formed, and preparations are underway for Glasgow's summer offering.



Publication Milestone

Research Associate Dr Ryan Mulholland celebrated a milestone achievement in the acceptance of his first research publication. Co-authored by Dr Giorgio Ciminata, Dr Francesco Manca, and Dr Claudia Geue, "Evaluating the effect of inequalities in oral anticoagulant prescribing on outcomes in people with atrial fibrillation" was published in March 2024 in European Heart Journal Open.

Hiroshima University's International Seminar 2024

In April, Professor Emma McIntosh visited Japan as part of University of Glasgow and Hiroshima University's International Seminar 2024. Emma was invited, along with the School of Health and Wellbeing Head Jill Pell, to present on the topics of Health Economics and Wellbeing respectively. The well-attended seminar also included speakers from Hiroshima University and set out to explore new research and development opportunities in multidisciplinary fields such as health economics. April's visit hopes to mark the beginning of a new professional relationship between the Universities of Glasgow and Hiroshima, with future collaborations, visits, and the development of a capability and well-being instrument for economic evaluations on the horizon.



2nd Place at Early Career Researchers using Statistics Symposium

Ryan McChrystal achieved second place at the Early Career Researchers using Statistics Symposium 2024. The symposium, organised by the Health Sciences Research Unit at University of Aberdeen, saw a variety of PhD students, early career researchers, and professors all presenting on their ongoing work. Ryan's presentation explored his individual participant data analysis project where, as part of his PhD, he is looking at how rates of attrition — patients dropping out of randomised trials — occur over time in trials for different conditions, such as patients with type 2 diabetes and COPD.

A Visit from Professor Stéphane Verguet



HEHTA had the privilege of welcoming Professor Stéphane Verguet from Harvard University to the University of Glasgow on a knowledge sharing visit in June. Stéphane is Associate Professor of Global Health in the Department of Global Health and Population and a faculty member of the Center for Health Decision Science (CDHS) at the Harvard T.H. Chan School of Public Health. CHDS, like HEHTA, aim to promote more informed and systematic decision making in the use of health-related technologies and public health. HEHTA invited Stéphane to join the team at a number of internal workshops and to deliver lectures for the Maurice Bloch and GhESS Seminar series. The workshops encouraged insightful discussion on equity-informative evaluation and extended cost effectiveness analysis, and the well-attended lectures allowed Stéphane to expand on his extensive research.

You can read HEHTA's short interview with Stéphane, where he talks through his visit, his career so far, and advice for aspiring health economics, on our website here.



Award Nomination

Our NIHR Global Health Research Group on Arthritis was shortlisted for the University of Glasgow Changing Futures award. This award recognises collaborative teams that are making meaningful contributions in areas of sustainability and net zero, societal and health inequalities, and other global and societal challenges. Co-Director of HEHTA, Professor Emma McIntosh, was principal investigator for the project, which investigated the adverse effects that musculoskeletal disorders — including arthritis — have on health, wealth, and quality of life for individuals and communities in Tanzania. You can read more about the impact of the project, which concluded in 2022, [here](#).

Conferences

Our long-standing presence at global events continued this summer at a variety of international conferences in Health Economics and Health Technology Assessment. From symposium panels to abstract presentations, colleagues represented the team at several leading events, including HTAi 2024 Annual Meeting in Seville, EuHEA in Vienna, and ISD in Bergen.

Photo: Professor Neil Hawkins at HTAi 2024 in Seville.



A Visit from Professor Sara Twaddle

In October, we were pleased to have our Honorary Professor Sara Twaddle on campus to deliver a seminar on the realities of health service decision-making. With an illustrious career in health economics, including prestigious roles such as Director of Evidence at Healthcare Improvement Scotland, Sara shared her invaluable insights with the team.



Team Promotions

The team celebrated a series of well-deserved promotions following the University of Glasgow's Academic Promotion and Zone Movement Round 2024. The university's promotion and zone movement round is an annual process designed to recognise and reward excellent performance that supports the delivery of university objectives. Following their respective applications, Robert Heggie, Martin Taylor-Rowan, and Katherine Simpson were promoted to Research Fellow; Nurnabi Sheikh was promoted to Research Associate; and Evi Germani was promoted to Reader.

Graduation Celebrations

Ryan Field, Lili Wei, and Lisong Zhang celebrated their graduations in the summer, while Francesco Manca graduated at the end of the year. Francesco, one of the team's research associates, attained his PhD via published work, submitting a portfolio of projects he'd been involved in since joining HEHTA in 2018.



MSc/PGDip/PGCert – Health Economics and Health Technology Assessment

Year in Review

Our postgraduate taught master's degree underwent a rebrand in 2024, returning in academic year 24/25 as "MSc Health Economics and Health Technology Assessment". Formerly titled MSc Health Technology Assessment, this name change has been implemented to better reflect the wider course contents and future direction of the course.

We welcomed a total of 28 students in 2024, including an additional 10 students who joined as part of the 2024/25 cohort. We proudly celebrated the graduation of 10 MSc students, with 6 students earning merit and 4 students graduating with distinction. Additionally, 2 students were awarded a Postgraduate Diploma (PgDip), while 7 successfully completed a Postgraduate Certificate (PGCert). These results reflect the dedication of our staff and students alike, and the high academic standards of our program.

Co-Directors of the MSc Programme, Dr Claudia Geue and Dr Eleanor Grieve

We were delighted to announce the rebrand of our MSc Health Economics and Health Technology Assessment. Health Economics is an integral part of who we are and what we do in HEHTA. In renaming our MSc, we are not only more accurately reflecting the scope of our research, education, and expertise, but are sending out a clearer message to prospective students who want to come and study with us. Further changes include the introduction of a new teaching module 'Research Methods in Health Economics and HTA', which we will offer from September 2025.

The last year also saw us teaming up with colleagues across the world to deliver a joint HTAi seminar. We presented the extent to which four existing HTA Master programs listed in the HTAi Educational Offers Database provide their education in line with the required competencies of HTA practitioners. We also discussed learnings from each other and explored the possibilities for future collaboration to enhance education and training in HTA globally.

MSc Graduate Focus: Meaghan Bartlett

Meaghan Bartlett is one of our 2024 MSc Graduates. Working as a consultant in HE and HTA during her studies, the flexibility offered from our distance learning was key in her ability to undertake her masters. We welcomed Meaghan on campus in December for her graduation.



Why did you choose to study with us?

I chose to get my master's in health economics and health technology Assessment from the University of Glasgow because of my interest in the program content as well as the flexibility to study completely online. Being able to keep working whilst studying was very important to me, so the distance learning component was crucial to my decision to pursue postgraduate studies. Since I am not from the UK, this program would only have been accessible to me in a fully online format, so it was very helpful to be able to study this way. Whilst studying at the university of Glasgow, I was also working as a consultant in the field of health economics and outcomes research.

How has your study improved your Career? What was the most valuable thing you learned from your time with us?

My study improved my career by giving me a deeper understanding of how health technology assessment practice and policy varies between countries in order to meet the different needs and regulations across regions. During my time in the program, I was able to really push myself and learn what I am capable of — particularly while working on my dissertation. Getting to do my own research showed me that I can continue to contribute to growth in this space, and that was probably the most valuable thing that I learned.

What was your favourite thing about the course?

My favourite thing about the course was the people: getting to know the faculty and seeing the passion and knowledge that they brought to the course material made the classes more interesting — even when it was a class that I wasn't super excited about, like statistics! And when I was working on my dissertation, it was so fun to get to know my supervisors one on one and collaborate with them during the research process.

What would you say to those thinking about applying for an MSc in Health Economics and Health Technology Assessment?

To anyone thinking about applying for an MSc in HE and HTA, I would say go for it! If you have any interest in health technology assessment, health economics, global health, this program is a great opportunity for you to deepen your knowledge and further develop your research skills. It's an accessible program run by really great people, so I would absolutely recommend.



PHD Overview 2024



Current Students

Name	Title	HEHTA Supervisor(s)
Saleh Ali M Almazam	Understanding sub-groups in clinical trials	David McAllister Jim Lewsey
Khalid Alsallumi	Use of serious adverse event reporting as a metric of representativeness in clinical trials for pharmacological intervention of novel antidiabetics	David McAllister Jim Lewsey
Hajar Noji	Assessing cost-effectiveness and affordability of new expensive treatment options and impact on sustainability of health systems	Claudia Geue Eleanor Grieve
Joan Quigley	Evaluating the Impact of Regionalising Healthcare Systems	Neil Hawkins
Hanin Farhana Binti Kamaruzaman	Disinvestment in healthcare: Stakeholder engagement and methodological analysis in optimising resource allocation in the Malaysian context	Olivia Wu Eleanor Grieve
Laura Bentley	Using citizen science research to inform coastal and marine natural capital approaches	Katherine Simpson
Luxzup Wattanasukchai	Developing of complex interventions guidance in Thailand: a case study with cholangiocarcinoma	Olivia Wu Kathleen Boyd Nicola McMeekin

Name	Title	HEHTA Supervisor(s)
Novatus Tesha	Cost-effectiveness of cervical cancer HPV DNA self-testing screening in Low Resource Setting	Claudia Geue Eleanor Grieve Nishant Jaiswal
Ryan McChrystal	Predictors of trial attrition using individual participant-level data and aggregate-level data from multiple trials	David McAllister
Septiara Putri	Development of the cardiometabolic disease policy model: Advancing the role of real-world evidence from UK primary care data	Giorgio Ciminata Claudia Geue Jim Lewsey
Shelagh Szabo	Incorporating qualitative evidence in health technology assessment	Neil Hawkins Evi Germani
Tzujung Lai	How can HTA support the optimal use of high-cost devices? A case study of robotic-assisted surgery in Scotland	Kathleen Boyd Robert Heggie
Watcharakorn Riabori	Factors influencing decision-making in Youth-Friendly Health Services (YFHS) provision and improving access to the services in Thailand	Evi Germani
YuanTao Huang	Qualitative research in Health Technology Assessment: Advancing methods and applications	Evi Germani
Yuejiao Duan	Economic evaluation of preventive treatments for drug-related harms in people who injecting drugs	Kathleen Boyd
Fabiola Lemus	The association between type 2 diabetes mellitus and cancer incidence	Neil Hawkins Kathleen Boyd

2024 Graduates

Name	Title	HEHTA Supervisor(s)
Dr Francesco Manca	The epidemiology of alcohol use disorder and public health policies to tackle alcohol-related harm: a case study of Scotland and the minimum unit pricing for alcohol	Jim Lewsey (Advisor)
Dr Lili Wei	Understanding and improving the applicability of randomised controlled trials: subgroup reporting and the statistical calibration of trials to real-world populations	David McAllister Jim Lewsey
Dr Lisong Zhang	Physician's Prescribing Preference as an Instrumental Variable in Comparative Effectiveness Research	Jim Lewsey David McAllister
Dr Ryan Field	Potential of joint modelling of longitudinal observations and time-to-event data to improve prognosis in chronic heart failure studies	Jim Lewsey

PhD Focus: Dr Lili Wei

Lili Wei has been travelling across the world to work with collaborators at the Hospital for Sick Children in Canada, the Steno Diabetes Center Aarhus in Denmark, and attending the International Population Data Linkage Network (IPDLN) conference in the US. She also successfully completed her PhD.



What was the focus of your PhD research, and what inspired you to pursue it?

My PhD focused on calibrating clinical trial findings to routine disease registries to make trial results more representative. Building on my master's project, I found this topic both interesting and methodologically innovative. It allowed for the estimation of treatment effects of new medications in real-world populations without the need for additional resource-intensive clinical trials.

How has your experience as a PhD student influenced your current role at HEHTA?

My PhD focused primarily on methodology and statistical modelling, but I did not have much training in health economics prior. Working at HEHTA has given me valuable opportunities to gain HE training, engage with HE experts, and get involved in HE projects. I really enjoy combining the skills I developed during my PhD with the new skills I have gained through HE training to work on these projects. I feel very fortunate to have discovered my passion very early in my career.

What was the biggest challenge during your PhD, and how did you overcome it?

The biggest challenge was that my first paper took a long time to get accepted as it's difficult to find peer reviewers, which put me under lots of pressure. With the support of my supervisors and collaborators, we were able to refine the paper to be more practical and understandable. I will always remember when one of my collaborators encouraged me by saying, "Don't lose hope!" — it meant a lot to me.

What advice would you give to current PhD students looking to transition into academic or research roles?

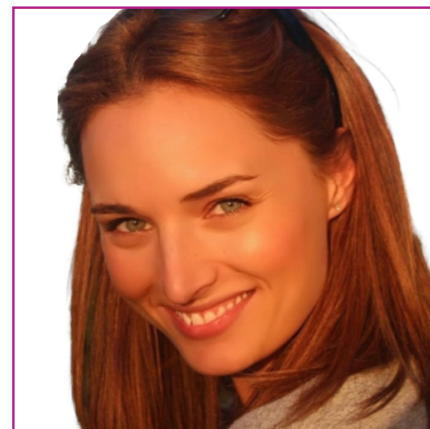
When you encounter research that you don't fully understand yet, but you know that with the right skills you would be able to do it, just go ahead and learn them. Don't be afraid or think, "I can't do it." Instead, believe in your potential and your ability to learn new things — you will enjoy the process.

Fireside Chat: Decision-Making Committees



Professors Olivia Wu, David McAllister, and Neil Hawkins have all served on a variety of NICE committees that make real decisions for the NHS.

They sat down with Emma Steel, our qualitative researcher, to delve further into the impact of health economics in shaping NHS policies and practices, and to provide some insight into the important role of decision-making committees.



ES: To start, could you each briefly share how you got involved in health economics?

OW: I was doing my MSc in Clinical Pharmacology when I was introduced to a senior staff member at the department of Public Health who had a special interest in medical decision-making, and so I got interested in health economics through the world of medical decision-making.

DMcA: I was interested in treatments and how well they worked in people with multiple conditions, i.e. multi morbidity, which lead me to looking at combining trial data and observational data to try and produce an estimate. At this point I discovered that this belonged to health economics and the field of health technology assessment.

NH: I was working in the pharmaceutical industry at the time in clinical development, this must be over 25 years ago, and I was trying to decide where to take my career next. I came across the field of health economics and decided it looked interesting. I did my master's at the University of York and have been working in the field ever since. It's been absolutely amazing to see how it's all developed.

ES: And what motivated you to get involved with NICE and its decision-making committees?

OW: I've always been acutely aware of the importance of research impact. The path to HTA research impact is to influence decision-making, and so the opportunity to be a decision-maker and take that extra step from producing the evidence to actually making a genuine decision for the health service was impossible to resist. So, I applied to be on the NICE technology appraisal committee.

DMcA: The reason I got involved with NICE is because the methods work that I do is designed to inform the kind of analysis that go on to inform the decisions that NICE makes.

ES: When you're on these committees, what does the process of decision-making look like? What role does health economics play in those decisions?

DMcA: I'm on one of the NICE health technology committees and some of the key questions ask is this treatment cost effective? Is it worth it? Because it means that the resource can't be spent elsewhere, it's a question about opportunity cost. The method to then address that effectively is a health economic model - a health technology model. Whether or not the treatment is worth paying for depends on how much the treatment costs. So actually, quite often, although a treatment might be found not to be cost effective, that can lead to a change in price and then it can become cost effective.

NH: I sit on the NICE diagnostics committee and we still have the same principle: use resources in an efficient manner and ensure that the opportunity cost of investing in the new technology is justified. But I think our debates are far less concerned with the cost effectiveness of these products, these technologies, because often they are actually highly cost effective because of the dynamics of diagnostics and the medtech market. We spend a lot of time looking at the quality of the evidence and how certain we are that the technologies will do what they say they will do. It's all about whether we're convinced about the impact of these technologies on patient outcomes, and particularly in diagnostics, if we employ diagnostics, how will it change the pathway for a patient, and how will that change in pathway alter their outcomes?

ES: What would you say are some of the biggest challenges you've faced then when applying health economics in this real-world decision making for the NHS?

OW: All evidence comes with some level of uncertainty. The biggest challenge is to make decisions under uncertainty, to understand what matters and what doesn't. You need to be accountable in your decisions, and so the other challenge is also to be able to be clear on your own decision-making pathway and be able to articulate and defend it when needed.

NH: In the field of diagnostics, it's the lack of evidence. We don't have clinical trials that capture clinical outcomes for these products, and there are good reasons why: companies can't afford to run them, and other companies can, in any event, free ride on that investment. We then have to rely on modelling and other sources of evidence and how they're being combined. In the device sector, we're actually looking at a lot of AI; there's lots of concerns about the kind of wider impacts here on physician behaviour, patient behaviour, and long-term outcomes. So, there's a great deal of uncertainty and a lot of judgement required. We spend a lot of

time listening to physicians, specialist committee members, and patients. It's very different from my experience of being involved in technology appraisals where it's much more technical trial evidence led and so on, and I think that makes it really interesting and very, very challenging.

ES: And do you find it beneficial hearing the patient voice in those decisions?

NH: I personally think the patient voice is really important, but one of the challenges is that we can only have one or two patients in the room and they cannot represent all patient views and the diversity of patient views and experience. But what I do think they're really important for is reminding us about the patient, and that is an important part of discussion.

DMcA: I think the patient voice is very valuable. However, there are issues with the patient voice that I think make it very challenging. Number one, I think that it places quite a big weight on the patients involved and people involved with the disease who may feel that a drug being approved and being made available to people with the condition rests upon what they say. I think a second challenge is the fact that the voice of other patients is not heard. For example, if you're going to spend money on a new cancer treatment and you're not going to spend money on providing community psychiatric nursing for somebody with schizophrenia, there's no one with schizophrenia on the call. So, it's really very challenging to have meaningful and balanced patient voices. I think that a third big challenge that is encountered is the resource available to perform the health economic modelling. I think the access to data can be very challenging. It's not our role in the committee to do the analysis, but it's very clear that access to data can be challenging. Resource and time is always an issue.

ES: As methodologists, you're balancing theoretical models and complex approaches with the practical real world needs of the NHS. How do you ensure that the decisions you make in committee reflect the true needs and constraints of the healthcare system?

OW: Follow the processes and guidance.

NH: I think we do this by having a wide range of representation on the committees. The ones I sit on have clinicians, we have hospital finance representatives, we have lay members, methodologists, and so on. It's very important for our committees that we have primary care physicians on because the things we're looking at often do impact in primary care. So that's been vital to have really engaged primary care physicians. Then we have obviously inputs on the guidance when it comes out, so that can include lots of input from the clinical colleges from different patient groups, from manufacturers, and so on. It's a lot of consultation.

ES: How are all those different views and different backgrounds managed, especially if people are coming with completely different views? Can that be quite difficult?

NH: There can be quite healthy debate on the committees I'm on; not all people are in favour of these technologies and certainly not the AI-type technologies. So, there is often very lively debate, and we also look at how we might mitigate risks of their introduction. Again, interested in David's views; I think the dynamics on the committees I sit on are very different from the TA committees.

DMcA: No, I think it's very similar; I think that there's often a lot of debate about the reasonableness of different assumptions. And I would say that's probably the two areas: you have reasonableness of certain assumptions, and coping with uncertainty - particularly with the kind of known unknowns.

ES: How do you see the role of health economics evolving in the NHS and beyond over the next few years?

OW: As ambitions grow while resource constraints persist, the need to weigh costs against benefits will become even more critical. How we define and trade-off benefits for quite complex systems-level interventions is the next big challenge.

DMcA: The NHS is in a really challenging situation. The population is ageing - there's no signs of that abating in the UK or elsewhere. I think the pressures towards cost effectiveness are likely to increase, and I think that debates are therefore likely to become more contested. Even in my lifetime, the things that the NHS has funded has changed and I think that will continue. Even now, the recent GLP-1 agonist drugs, and Ozempic, something like 80% of these are now obtained from private prescriptions. I think we're going to see a more complex ecosystem in healthcare in the UK. With ageing populations, retirement age is increasing, and I think we are increasingly going to have to think about what the cost and benefits are not just in terms of quality of life, but also in terms of productivity. I think increasingly people with chronic diseases are going to be working if the economy is going to be kept on the road.

NH: I think incredibly challenging times are ahead, but these issues are not unique to the UK. I was in Taiwan with Olivia last week and they were talking about their super-aged population. So, health economics will basically help inform decision making in very challenging times; it will help us redirect resources and make sure we have clear signals to developers of what technologies we need and how they might be valued. I think also the evidence generation landscape will change. There's the phrase 'learning NHS' and I think we do have to have an NHS which can evaluate technologies as they're being introduced.

DMcA: I agree with that wholeheartedly. And I also would like to see randomisation being broken out of the framework of formal randomised control trials and introduced into healthcare settings. Because, like Neil was saying, we've got great outcome data,

and even if we can get at the simplest level when we have a new technology, we could randomly decide which locations within the NHS it gets introduced. That would be powerful. And then to go even further and have a kind of point of care randomisation I think would be really excellent for decision making.

NH: I think it may also be interesting to look at ethics and our ethics approval systems - how that works or sometimes doesn't work. On the wider topic, the UK likes to portray itself as a life science superpower, but the fact is we are falling behind; it's taking way too long to get approval for new studies and trials. If we want to reach our potential, we do have to look at the whole machinery on approval regulation, evidence collection, evidence sharing, data sharing, and so on. And again, I think health economists, people involved in HTA, have an important role in these debates.

ES: And finally: what advice would you give to aspiring health economists who are looking to get involved in decision making?

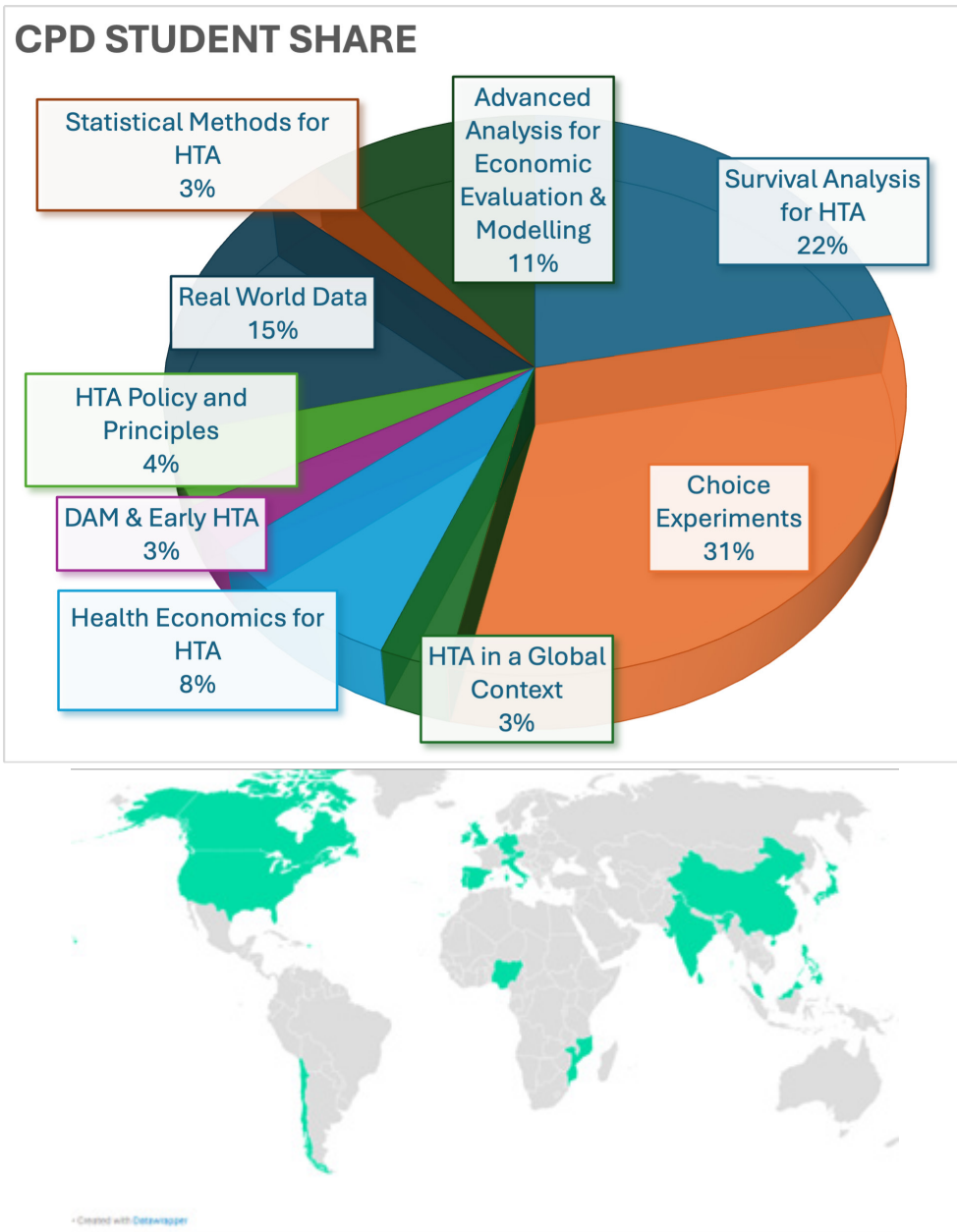
NH: Apply to sit on a committee - have a go. The first thing to do is actually observe meetings, and lots of them. Post COVID, it's really easy because most of these meetings are now virtual, so you can just watch them from the comfort of your own desk. I think decision-making committees are an incredibly satisfying thing to do; it's a great responsibility as well. I find it a kind of an honour, you know, a pleasure to actually spend time with such a diverse group of people debating these topics - it makes you think.

OW: Get involved! To produce evidence that is truly useful and impactful, you need to understand what evidence decision makers need and how they use evidence.

DMcA: You might think that the things that you do are purely academic. So, if you are to be involved with the committee, then it can be quite encouraging to see that that's not the case. There's nothing more gratifying than to have some decision turn on some issue that you've done your research in.

CPD Courses

Our short courses in Health Economics and Health Technology Assessment returned in academic year 24/25, attracting a new cohort of professionals eager to widen their expertise and network with like-minded peers. This year marked another successful intake, with participants joining us from over 20 countries worldwide. Notably, some of our courses experienced impressive year-on-year growth, reflecting the demand for the latest in industry education in our ever-evolving field.



My HEHTA Journey



As this 2024 came to a close, our PhD student Yuejiao Duan embarked on a new HEHTA journey as Trainee Health Economist. Split alongside her current studies, Yuejiao's new role has her working with Professor Kathleen Boyd on the Partnership for Change (PfC) research project. Yuejiao's story highlights both her personal contribution and growth since joining the team as well as HEHTA's long-standing culture of capacity strengthening.

Can you tell us about yourself, your background, and your new role at HEHTA?

Hello! I am Yuejiao, and I am currently doing a PhD in the HEHTA team. I completed my 5-year undergraduate training in clinical medicine at the Heibei Medical University in China, and have a degree in Master of Public Health with specialism of Health Economics from the University of Glasgow. Recently, I started my new role as a trainee health economist in the HEHTA team, working on the Partnership for Change project with my line manager — also my PhD supervisor — Professor Kathleen Boyd.

What brought you to HEHTA and the University of Glasgow specifically?

I knew very little about the University of Glasgow until I was accepted to do my master's degree here, but I had noticed that UofG was one of the oldest and most prestigious universities in the UK. It was quite a random choice to come to UofG, but HEHTA is the reason I've stayed! I enrolled in HEHTA's health economics courses during my master's and had a very enjoyable time gaining new knowledge and writing up my thesis with help from my supportive supervisory team. So, I decided to pursue a longer-time opportunity to study in HEHTA: completing my PhD here.

Tell us about your PhD? When do you graduate?

Hopefully I can finish my PhD in 2025! My research is focused on the illicit drug policy at international and Scottish levels. It comprises three major components: understanding how economic evidence has contributed to illicit drug policies; employing a discrete choice experiment to inform the service design of a safer drug consumption facility in Scotland; and using decision modelling to project the cost-effectiveness of introducing such facilities in Scotland.

Favourite project or publication you have been a part of so far?

My favourite PhD project is the discrete choice experiment because it is a survey-based study; I had the opportunity to speak first hand with survey participants who use drugs. Listening to people's stories of struggle, I became aware of the complex realities behind drug use and how people often face homelessness, poverty, mental health challenges, and trauma. They described to me how their circumstances had led them to use drugs, and in turn, how drug use made their life even more difficult. Through this project I realised that policy decisions can have significant life-changing consequences for one's life. Such a realisation has made me more committed to conducting research that is rigorous,

responsible, respectful of those it represents, and carefully interpreted to avoid misrepresentation or harm.

Your favourite conference you have been a part of?

2024 EuHEA in Vienna. It was a great conference, covering a broad range of interesting topics. It was also great seeing many PhD students presenting their work, sharing ideas, and getting feedback.

Tell us a bit more about the Partnership for Change project, the first project of your traineeship?

PfC aims to understand whether infant-parent support (IPS) can reduce place-based inequalities by recruiting and retaining representative proportions of marginalised families and improving their service access. It aims to do this through testing clinical and cost-effectiveness of IPS in a definite randomised controlled trial in reducing risk of children-in-need being maltreated, improving child/parent mental health and relationship, and improving their community connectedness to services and supports.

Favourite thing about HEHTA?

Vibe! Somehow, there is always a reason we have a party in the kitchen area and are celebrating something in the middle of the day — sometimes with a glass of champagne in our hands!

Presentations

Duan Y. DRNS – Drug Research Network Scotland, Edinburgh, UK. *Exploring people who use drugs' (PWUD) preference towards service design of a supervised drug consumption facility (SDCF) in Scotland: A discrete choice experiment.* 5th June 2024.

Duan Y. DRNS – Drug Research Network Scotland, Edinburgh, UK. *How has economic evidence contributed to illicit drug policy? A systematic review of methodologies and implications for decision making.* 5th June 2024.

Duan Y European Health Economics Association (EuHEA), Vienna, Austria. *Exploring people who use drugs' (PWUD) preference towards service design of a supervised drug consumption facility (SDCF) in Scotland: A discrete choice experiment.* 3rd July 2024.

Fraser H. Health Economists' Study Group (HESG) Summer Conference 2024, Warwick, UK. *Supported weight loss to alleviate Long COVID symptoms: An economic evaluation alongside a randomised clinical trial.* 4TH July 2024.

Fraser H. Glasgow Health Economics Seminar Series (GhESS) 2024, Glasgow, UK. *Cost-effectiveness of a Weight Management Programme to Alleviate Symptoms of Long COVID.* 4th December 2024.

Fraser H. HEHTA Extended Cost Analysis Workshop, Glasgow, UK. *ReDIRECT: A potential case for Extended Cost-Effectiveness Analysis.* 18th June 2024.

Desai, H., **Grieve, E**, and Wright, C. Society for Social Medicine & Population Health 68th Annual Scientific meeting, Glasgow, UK. *What is the opportunity cost of funding ready-to-use supplementary foods compared to counselling for moderate malnutrition?* September 2024.

Hawkins N. 2024 HTAi Annual Meeting, Seville, Spain. Symposium Panel Contribution: *Should One Size Fit All? The Growing Need For Indirect Treatment Comparisons To Address All Health Systems' Needs.* 18th June 2024.

Heggie R. European Health Economics Association (EuHEA), Vienna, Austria. *What methods are currently available for incorporating implementation considerations within the economic evaluation of health technologies? A systematic review.* 1st July 2024.

Lewsey J. NIHR School for Public Health Research (SPHR) Seminar, Birmingham, UK. *Evaluating the impact of minimum unit pricing for alcohol in Scotland: an overview of the quantitative evidence and a look to the future.* 10th May 2024.

Manca F and **Lewsey J.** Society for the Study of Addiction (SSA) Annual Conference 2024, Newcastle, UK. *Pharmacological treatments for alcohol dependence: Evidence on uptake, inequalities and comparative effectiveness from a UK population-based cohort.* 15th November 2024.

McIntosh E. Hiroshima University International Seminar 2024, Hiroshima, Japan. *Wellbeing.* April 2024.

Rana D, **Bouttell J**, **McMeekin N**, and **Hawkins N.** Living Lab Healthcare Innovation Symposium 2024, Glasgow, UK. *Tri-Sectoral Collaboration in Translation of a Digital Health Technology: Perspectives of Academia, Industry, and Healthcare Provider Partners.* 6th November 2024.

Riabroi K. 17th European Public Health Conference, Lisbon, Portugal. *Barriers to young people's use of sexual and reproductive health services in Asia-Pacific.* November 2024.

Sheikh N. 42nd International System Dynamics Conference, Bergen, Norway. *A System Dynamics Model of Community-Based Health Insurance System in Bangladesh.* August 2024.

Simpson K. Envecon – UK Network for Environmental Economists, London, UK. *Maximising biodiversity gains in woodland creation schemes.* 8th March 2024.

Simpson K and **McMeekin N.** MASTS, Marine Alliance for Science and Technology for Scotland Annual Conference, Glasgow. *Beyond Net Zero: A Framework for Natural Capital Markets in the Marine Environment.* 5th November 2024.

Steel E, Duncan S, Hall M, Stobo D, and Maclay J et al. (inc. **Germini E**). Living Lab Healthcare Innovation Symposium 2024, Glasgow, UK. *Long way off from a human... this is something that can work alongside us: A longitudinal qualitative evaluation of the acceptability of an artificial intelligence software to prioritise chest X-rays.* 6th November 2024.

Wei L. The International Population Data Linkage Network Conference 2024, Chicago, USA. *Estimating natural history of a treatment-eligible type 2 diabetes mellitus population in Scotland using linked primary and secondary care data: Scottish Diabetes Research Network - National Diabetes Dataset.* September 2024.

Wei L. The International Population Data Linkage Network Conference 2024, Chicago, USA. *Methodological Challenges when Using Routinely Collected Health Data for Research: A scoping review.* September 2024.

Wu O. Faculty of Pharmacy, Mahidol University. Real-World Evidence in HTA: Experience from the UK. September 2024.

Wu O. The role of patients in policy decision-making in Thailand, UK, and Taiwan Academic Conference. Patient voice in HTA decision-making: the UK experience. September 2024.

Publications

Ajetunmobi O, **McIntosh E**, Stockton D, Tappin D, Whyte B. Levelling up health in the early years: A cost-analysis of infant feeding and healthcare. *Plos one*. 2024 May 22;19(5):e0300267.

Alonso S, Arinaitwe M, Atuhaire A, Nankasi AB, Prada JM et al (inc. **McIntosh E**). The short-term impact of *Schistosoma mansoni* infection on health-related quality of life: implications for current elimination policies. *Proceedings B*. 2024 Jun 12;291(2024):20240449.

Black M, Yuill C, Harkness M, Ahmed S, Williams L et al (inc. **Boyd KA**). Cervical ripening at home or in hospital during induction of labour: the CHOICE prospective cohort study, process evaluation and economic analysis. *Health Technology Assessment* (Winchester, England). 2024 Dec;28(81):1.

Blair S, Henderson M, McConnachie A, **McIntosh E**, Smillie S et al. The Social and Emotional Education and Development intervention to address wellbeing in primary school age children: the SEED cluster RCT. *Public health research* (Southampton, England). 2024;12(6):1-73.

Bouttell J, **Fraser H**, Goodlad JR, Hopkins D, McKay P et al (inc. **Hawkins N**). Adding a Gene Expression Profile Test to Aid Differential Diagnosis and Treatment in Aggressive Large B-Cell Lymphoma: An Early Exploratory Economic Evaluation. *Applied Health Economics and Health Policy*. 2024 Mar;22(2):243-54.

Brown A, Woods-Brown C, Angus K, **McMeekin N**, Hunt K et al. Recent evidence on rates and factors influencing smoking behaviours after release from smoke-free prisons: a scoping review. *International Journal of Prison Health*. 2024 Dec 5;20(4):450-65.

Bush A, **Simpson KH**, Hanley N. Systematic nature positive markets. *Conservation Biology*. 2024 Jun;38(3):e14216.

Cherney D, Folkerts K, Mernagh P, Nikodem M, Pawlitschko J et al (inc. **Hawkins N**). Comparative efficacy of Finerenone versus canagliflozin in patients with chronic kidney disease and type 2 diabetes: a matching-adjusted indirect comparison. *Journal of market access & health policy*. 2024 Jul 25;12(3):169-80.

Chikumbu E, Katiti V, Bunn C, Msoka EF, Sichali J et al (**McIntosh E**). A more equitable approach to economic evaluation: Directly developing conceptual capability wellbeing attributes for Tanzania and Malawi. *Social Science & Medicine*. 2024 Aug 1;355:117135.

Ciminata G, Burton JK, Quinn TJ, **Geue C**. Understanding Pathways into Care-homes using Data (UnPiCD study): a two-part model to estimate inpatient and care-home costs using national linked health and social care data. *BMC Health Services Research*. 2024 Mar 5;24(1):281.

Dagnan D, Thompson P, Hastings RP, Hatton C, Melville C et al (inc. **McMeekin N**). The influence of therapy quality on outcomes from behavioural activation and guided self-help treatments for depression in adults with intellectual disabilities. *British Journal of Clinical Psychology*. 2024 Sep 3.

Deo SV, Al-Kindi S, Motairek I, **McAllister D**, Shah AS et al. Impact of residential social deprivation on prediction of heart failure in patients with type 2 diabetes: external validation and recalibration of the WATCH-DM score using real world data. *Circulation: Cardiovascular Quality and Outcomes*. 2024 Mar;17(3):e010166.

Desai H, **Grieve E**, Wright C. OP48 What is the opportunity cost of funding ready-to-use supplementary foods compared to counselling for moderate malnutrition? *J Epidemiol Community Health* 2024;78:A19.

Devereux G, Cotton S, Nath M, **McMeekin N**, Campbell K et al. (inc. **Wu O**) Bisoprolol in patients with chronic obstructive pulmonary disease at high risk of exacerbation: the BICS randomized clinical trial. *Jama*. 2024 Aug 13;332(6):462-70.

Dibben GO, Gardiner L, Young HM, Wells V, Evans RA et al (inc. **McIntosh E**, **Ahmed S**). Evidence for exercise-based interventions across 45 different long-term conditions: an overview of systematic reviews. *EClinicalMedicine*. 2024 Apr 30.

Duncan SF, McConnachie A, Blackwood J, Stobo DB, Maclay JD et al (inc. **Wu O**, **Germeni E**). Radiograph accelerated detection and identification of cancer in the lung (RADICAL): a mixed methods study to assess the clinical effectiveness and acceptability of Qure. ai artificial intelligence software to prioritise chest X-ray (CXR) interpretation. *BMJ open*. 2024 Sep 1;14(9):e081062.

Fenny AP, Otieku E, **Owusu Achiaw S**, Okoe Boye B, Asenso-Boadi F et al. Impact of COVID-19 on the management of hypertension: a perspective on disease severity, service use patterns and expenditures from Ghana's health insurance claims data. *Journal of Human Hypertension*. 2024 Jun 20:1-9.

Fraser HL, Feldhaus I, Edoka IP, Wade AN, Kohli-Lynch CN et al. Extended cost-effectiveness analysis of interventions to improve uptake of diabetes services in South Africa. *Health Policy and Planning*. 2024 Apr 1;39(3):253-67.

Freeman SC, Sutton AJ, Cooper NJ, Gasparini A, Crowther MJ et al (inc. **Hawkins N**). Bayesian pairwise meta-analysis of time-to-event outcomes in the presence of non-proportional hazards: A simulation study of flexible parametric, piecewise exponential and fractional polynomial models. *Research Synthesis Methods*. 2024 Sep;15(5):780-801.

Friday JM, Cleland JG, Pellicori P, Wolters MK, McMurray JJ et al (inc. **McAllister DA**, **Lewsey J**).

Loop diuretic therapy with or without heart failure: impact on prognosis. *European Heart Journal*. 2024 Oct 1;45(37):3837-49.

Gallagher D, Spyrelli E, Anderson AS, Bridges S, Cardwell CR et al (inc. **McIntosh E**). Effectiveness and cost-effectiveness of a 12-month automated text message intervention for weight management in postpartum women with overweight or obesity: protocol for the Supporting MumS (SMS) multisite, parallel-group, randomised controlled trial. *BMJ open*. 2024 May 1;14(5):e084075.

Germeni E, Cooper J, **Briggs A**, Laurence J. Treatment discontinuation in adults with atypical hemolytic uremic syndrome (aHUS): a qualitative study of international experts' perspectives with associated cost-consequence analysis. *BMC nephrology*. 2024 Nov 14;25(1):411.

Germeni E, Fifer S, Hiligsmann M, Stein B, Tonkinson M et al. A genuine need or nice to have? Understanding HTA representatives' perspectives on the use of patient preference data. *International Journal of Technology Assessment in Health Care*. 2024 Jan;40(1):e60.

Giles L, Mackay D, Richardson E, **Lewsey J**, Robinson M et al. Evaluating the impact of minimum unit pricing (MUP) on alcohol sales after 3 years of implementation in Scotland: A controlled interrupted time-series study. *Addiction*. 2024 Aug;119(8):1378-86.

Gillooly A, Dagnan D, Hastings R, Hatton C, **McMeekin N** et al. Behavioural activation for depressive symptoms in adults with severe to profound intellectual disabilities: Modelling and initial feasibility study. *Journal of Applied Research in Intellectual Disabilities*. 2024 Mar;37(2):e13197.

Haag L, Richardson J, Haig C, Cunningham Y, **Fraser H** et al (inc. **McIntosh E**). Baseline characteristics in the remote diet intervention to reduce long-COVID symptoms trial (ReDIRECT). *NIHR Open Research*. 2024 Mar 5;4:7.

Hanlon P, Politis M, Wightman H, Kirkpatrick S, Jones C et al (**Wei L**). Frailty and socioeconomic position: A systematic review of observational studies. *Ageing Research Reviews*. 2024 Jul 16:102420.

Hasan MZ, Rabbani MG, Akter O, Mehdi GG, Ahmed MW et al (inc. **Ahmed S**). Patient Satisfaction With the Health Care Services of a Government-Financed Health Protection Scheme in Bangladesh: Cross-Sectional Study. *JMIR Formative Research*. 2024 Apr 24;8:e49815.

Heggie R, Boyd K, Kamaruzaman H, Wu O. What methods are currently available for incorporating implementation considerations within the economic evaluation of health technologies? A scoping review. *Health research policy and systems*. 2024 Sep 30;22(1):134.

Heggie R, Jaiswal N, McCartney E, Moss J, Menne T et al (inc. **Boyd K, Hawkins N, Wu O**). Central Venous Access Devices for the Delivery of Systemic Anticancer Therapy: An Economic Evaluation. *Value in Health*. 2024 Jan 1;27(1):7-14.

Hiligsmann M, Liden B, Beaudart C, **Germeni E**, Hanna A et al. HTA community perspectives on the use of patient preference information: Lessons learned from a survey with members of HTA bodies. *International journal of technology assessment in health care*. 2024 Jan;40(1):e17.

Ho FK, Allan M, Shao H, Man KK, Jani BD et al (inc **Lewsey J**). Maternal and pregnancy factors contributing to the association between area deprivation and infant mortality in England: a retrospective cohort study. *The Lancet Regional Health–Europe*. 2024 Dec 1;47.

Hudson JA, Sanga L, Jobe M, Etyang AO, **McAllister D** et al. Sub-Saharan Africa's contribution to clinical trials in international acute coronary syndromes and heart failure guidelines. *JACC: Advances*. 2024 Dec 1;3(12_Part_2): 101383.

Igelström E, Kopasker D, Craig P, **Lewsey J**, Katikireddi SV. Estimating the causal effects of income

on health: how researchers' definitions of "income" matter. *BMC public health*. 2024 Jun 11;24(1):1572.

Jaiswal N, Field R. Network meta-analysis: the way forward for evidence-based decisions. *Clinical Epidemiology and Global Health*. 2024 Mar 1;26:101531.

Jakubowski S, Holko P, Nowak R, Warmuth M, Doms M et al (inc.). Clinical and non-clinical aspects of reimbursement policy for orphan drugs in selected European countries. *Frontiers in Pharmacology*. 2024 Nov 19;15:1498386.

Kamaruzaman HF, Grieve E, Abd Rahim KN, Izzuna MM, Wai LS et al (inc. **Wu O**). Stakeholders' perspectives on disinvestment of low-value healthcare interventions and practices in Malaysia: an online survey. *International Journal of Technology Assessment in Health Care*. 2024 Jan;40(1):e57.

Karugu CH, Binyaruka P, Ilboudo PG, Sanya RE, Mohamed SF et al (inc. **Grieve E, Deidda M**). Economic impact of COVID-19 on patients with type 2 diabetes in Kenya and Tanzania: A costing analysis. *BMJ Public Health*. 2024 Aug 24;2(2).

Kent J, Nordgren R, Ahn D, Lysandrou M, Diaz A et al (inc. **McMeekin N**). Cost effectiveness of commercial portable ex vivo lung perfusion at a low-volume US lung transplant center. *Artificial Organs*. 2024 Nov;48(11):1288-96.

Krauth SJ, Steell L, Ahmed S, **McIntosh E**, Dibben GO et al (inc. **Lewsey J, McAllister DA**). Association of latent class analysis-derived multimorbidity clusters with adverse health outcomes in patients with multiple long-term conditions: comparative results across three UK cohorts. *Eclinicalmedicine*. 2024 Aug 1;74.

Kyando HA, **Tesha N**, Metta E. Predictors of Mothers Living with HIV Uptake of HIV Early Infant Diagnosis Services in Iringa District, Tanzania. *Journal of the International Association of Providers of AIDS Care (JIAPAC)*. 2024 Sep;23:23259582241272007.

Lai TJ, Heggie R, Kamaruzaman HF, Bouttell J,

Boyd K. Economic Evaluations of Robotic-Assisted Surgery: Methods, Challenges and Opportunities. *Applied health economics and health policy.* 2025 Jan;23(1):35-49.

Lai TJ, Roxburgh C, Boyd KA, Bouttell J. Clinical effectiveness of robotic versus laparoscopic and open surgery: an overview of systematic reviews. *BMJ open.* 2024 Sep 1;14(9):e076750.

Laurie E, Msoka EF, Wyke S, Yongolo NM, Bunn C et al (inc. **McIntosh E**). ‘... You become a prisoner of your life’: A qualitative study exploring the experience of joint pain and accessing care in Hai, Tanzania. *SSM-Qualitative Research in Health.* 2024 Dec 1;6:100481.

Laurie E, Siebert S, Yongolo N, Halliday JE, Biswaro SM et al (inc. **McIntosh E**). Evidencing the clinical and economic burden of musculoskeletal disorders in Tanzania: paving the way for urgent rheumatology service development. *Rheumatology Advances in Practice.* 2024 Jan 1;8(1):rkad110.

Lees J, Crowther J, Hanlon P, Butterly EW, Wild SH et al (inc. **McAllister D**). Participant characteristics and exclusion from phase 3/4 industry funded trials of chronic medical conditions: meta-analysis of individual participant level data. *BMJ medicine.* 2024 May 3;3(1):e000732.

MacRae J, **Ciminata G, Geue C**, Lynch E, Shenkin SD ET AL. Mortality in long-term care residents: retrospective national cohort study. *BMJ Supportive & Palliative Care.* 2024 Oct 9.

Manca F, Ciminata G, Grieve E, Reboud J, Cooper J et al (inc. **McIntosh E**). Cost-effectiveness of sentinel screening of endemic diseases alongside malaria diagnosis: A case study in schistosomiasis. *PLOS Neglected Tropical Diseases.* 2024 Jul 29;18(7):e0012339.

Manca F, Lewsey J, Mackay D, Angus C, Fitzpatrick D et al. The effect of a minimum price per unit of alcohol in Scotland on alcohol-related ambulance call-outs: A controlled interrupted time– series

analysis. *Addiction.* 2024 May;119(5):846-54.

Manca F, Lewsey J. Previous psychiatric hospitalizations as risk factors for single and multiple future alcohol-related hospitalizations in patients with alcohol use disorders. *Addiction.* 2024 Feb;119(2):291-300.

Manca F, Parab R, Mackay D, Fitzgerald N, **Lewsey J.** Evaluating the impact of minimum unit pricing for alcohol on road traffic accidents in Scotland after 20 months: An interrupted time series study. *Addiction.* 2024 Mar;119(3):509-17.

Manca F, Zhang L, Fitzgerald N, Ho F, Innes H et al (**Lewsey J**). Pharmacological treatments for alcohol dependence: Evidence on uptake, inequalities and comparative effectiveness from a UK population-based cohort. *Drug and Alcohol Review.* 2024 Jul;43(5):1183-93.

Msoka EF, Bunn C, Msoka P, Yongolo NM, Laurie E et al (inc. **McIntosh E**). Rapid ethnographic appraisal of community concepts of and responses to joint pain in Kilimanjaro, Tanzania. *BMJ Global Health.* 2024 Jan 1;9(1):e013245.

Mulholland RJ, Ciminata G, Quinn TJ, Pollock KG, Lister S ET AL (inc. **Geue C**). Delay and pay? Healthcare costs associated with late oral anti-coagulant prescribing in people with atrial fibrillation. *PharmacoEconomics.* 2024 Nov;42(11):1241-53.

Mulholland RJ, Manca F, Ciminata G, Quinn TJ, Trotter R et al (inc. **Geue C**). Evaluating the effect of inequalities in oral anti-coagulant prescribing on outcomes in people with atrial fibrillation. *European Heart Journal Open.* 2024 Mar;4(2):oeae016.

Murray S, Thompson J, Townsend RC, **Deidda M, Boyd KA** et al. Randomised placebo-controlled trial of antenatal corticosteroids for planned birth in twins (STOPPIT-3): study protocol. *BMJ open.* 2024 Jan 1;14(1):e078778.

Politis M, Crawford L, Jani BD, Nicholl BI, Lewsey J et al (inc. **McAllister DA**). An observational analysis

of frailty in combination with loneliness or social isolation and their association with socioeconomic deprivation, hospitalisation and mortality among uk biobank participants. *Scientific Reports*. 2024 Mar 27;14(1):7258.

Putri S, Ciminata G, Lewsey J, Jani B, McMeekin N et al (inc. **Geue C**). The conceptualisation of cardiometabolic disease policy model in the UK. *BMC health services research*. 2024 Sep 13;24(1):1060.

Rana D, Westrop S, Jaiswal N, Germani E, McGarty A et al (**Wu O**). Lifestyle modification interventions for adults with intellectual disabilities: systematic review and meta-analysis at intervention and component levels. *Journal of Intellectual Disability Research*. 2024 May;68(5):387-445.

Robles-Zurita JA, **McMeekin N**, Sullivan F, Mair FS, **Briggs A**. Health economic evaluation of lung cancer screening using a diagnostic blood test: the Early detection of Cancer of the Lung Scotland (ECLS). *Current Oncology*. 2024 Jun 18;31(6):3546-62.

Sanya RE, Karugu CH, Binyaruka P, Mohamed SF, Kisia L et al (inc. **Deidda M**). Impact of the COVID-19 pandemic on type 2 diabetes care and factors associated with care disruption in Kenya and Tanzania. *Global Health Action*. 2024 Dec 31;17(1):2345970.

Sharma D, Aggarwal AK, **Bahuguna P**, Prinja S. The impact of alternate methodological and structural assumptions on results of cost-effectiveness analysis: empirical evidence using three Indian economic evaluations. *Indian Journal of Public Health*. 2024 Jan 1;68(1):9-14.

Shemilt R, Sullivan MK, Hanlon P, Jani BD, De La Mata N et al (inc. **McAllister DA**). Sex differences in cancer outcomes across the range of eGFR. *Nephrology Dialysis Transplantation*. 2024 Nov;39(11):1799-808.

Sidik NP, Stanley B, Sykes R, Morrow AJ, Bradley CP et al (inc. **Heggie R, Wu O**). Invasive endotyping in patients with angina and no obstructive coronary artery disease: a randomized controlled trial.

Circulation. 2024 Jan 2;149(1):7-23.

Simpson SA, Evans RA, Gilbert HR, Branson A, Barber S et al (inc. **McIntosh E**). Personalised Exercise-Rehabilitation FOR people with Multiple long-term conditions (PERFORM): protocol for a randomised feasibility trial. *BMJ open*. 2024 Apr 1;14(4):e083255.

Skivington K, Matthews L, Simpson SA, Craig P, Baird J et al (inc. **Boyd KA, McIntosh E**, Petticrew M. Reprint of: 'A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance'. *International Journal of Nursing Studies*. 2024 Jun 1;154:104705.

Sosenko F, Mair FS, Nicholl BI, Hanlon P, **Lewsey J** et al. Cancer diagnosis after emergency presentation: impact of demographics, cancer types, and pandemic. *Academia Oncology*. 2024 Dec 16;1(2).

Sun Y, Witham MD, Clegg A, Taylor RS, Dibben G et al (inc. **McAllister D**). A scoping review of the measurement and analysis of frailty in randomised controlled trials. *Age and Ageing*. 2024 Nov;53(11):afae258.

Szabo SM, Hawkins NS, Germani E. The extent and quality of qualitative evidence included in health technology assessments: a review of submissions to NICE and CADTH. *International Journal of Technology Assessment in Health Care*. 2024 Jan;40(1):e6.

Tvrda L, Mavromati K, **Taylor-Rowan M**, Quinn TJ. Comparing the properties of traditional and novel approaches to the modified Rankin scale: Systematic review and meta-analysis. *European Stroke Journal*. 2024 Oct 30;23969873241293569.

Wei L, Butterly E, Pérez JR, Chowdhury A, Shemilt R et al (inc. **McAllister D**). Description of subgroup reporting in clinical trials of chronic diseases: a meta-epidemiological study. *BMJ open*. 2024 Jun 1;14(6):e081315.

Westrop SC, **Rana D, Jaiswal N, Wu O**, McGarty AM et al. (inc. **Germani E**). Supporting active engagement of adults with intellectual disabilities in lifestyle modification interventions: a realist evidence synthesis of what works, for whom, in what context and why. *Journal of Intellectual Disability Research*. 2024 Apr;68(4):293-316.

Yokobori Y, **Deidda M, Manca F**. Pharmaceutical intervention for hypertension in a rural district of the Republic of Zambia: a model-based economic evaluation. *BMJ open*. 2024 Sep 1;14(9):e084575.

Yongolo NM, Halliday J, Bunn C, Mtesha B, Kelly C et al (inc. **McIntosh E**). Estimating the prevalence and predictors of musculoskeletal disorders in Tanzania: a cross-sectional pilot study. *The Pan African Medical Journal*. 2024 Jan 30;47:36.

My Visit to HEHTA

Dr Mudith Karunatilaka returned to Sri Lanka this year following his 2-year knowledge sharing project with HEHTA. Mudith left as an HTA advocate, hoping to transfer his learning to the next generation of health care managers in Sri Lanka and develop an HTA system in his role within the Ministry of Health.



What brought you to HEHTA, and what were you hoping to gain from your visit?

As a senior medical professional attached to the ministry of health in Sri Lanka, I was looking to gain some exposure to HTA — an area of expertise which is lacking in my country. My simple reason for approaching HEHTA is their reputation as a world-leading institution for HTA with renowned professionals from different countries and who play a major role in providing guidance to Scotland and beyond in health care decision making.

What was the most valuable part of your time here?

This would be my involvement in the Best Services Trial (BeST): Effectiveness and cost-effectiveness of the New Orleans Intervention Model (NIM) for Infant Mental Health. This study examined the role of NIM in best supporting young children who have experienced maltreatment by ensuring they are placed in the most nurturing environment for their development. It focused on evaluating whether NIM is both effective and cost-effective in the UK context.

What aspects of HEHTA's work or culture stood out to you the most?

The overall friendly working atmosphere, including both the infrastructure and the nice bunch of colleagues - including my supervisor, Professor Kathleen Boyd. I was impressed with the environment which encourages critical thinking, knowledge sharing, and professional growth while maintaining a supportive and inclusive workplace.

How has your experience at HEHTA influenced your future plans? What's next?

The knowledge and experience I gained are now being applied in my current job role in the capacity of the Deputy Regional Director of Health Service of Colombo District, Sri Lanka. Here, I'm working towards establishing a HTA division. Further, I intend to increase the knowledge of HTA among Medical Administrators in Sri Lanka. I'm planning to do this through the College of Medical Administrators of Sri Lanka (CMASL) as a member of the CMASL committee for education and training.

Welcomes and Goodbyes

A large, three-dimensional wooden sign spelling out the word 'Welcome' in a bold, sans-serif font. The sign is placed on a red surface decorated with white, wavy, hand-drawn lines. In the upper right corner, there are some grey, rectangular blocks stacked together.

Welcome

Laura Bentley,
PhD Student

Martyna Chabalowska,
Trainee Health Economist

Stephen Knight,
Clinical Lecturer

Fergus Lamont,
Marketing and Communications Administrator

Martin Taylor-Rowan,
Research Associate

Hajar Noji,
PhD Student

Goodbye

Hanin Kamaruzaman,
PhD Student

Fabiola Lemus Villafuerte,
PhD Student

Ryan Field,
Research Associate

Yujin Du,
Project Manager

Miriam Yentumi,
Administrator

Membership of Expert Bodies

Olivia Wu

- Chair NIHR HTA Clinical Evaluations and Trials Funding Committee
- Member of NIHR Senior Investigator Appointment Committee
- Member of the European Cooperation in Science & Technology Innovators Grant Committee
- Member of the NIHR Race Equity and Diversity in Careers Incubator Management Board
- Member of the Europe Program Committee for the International Society for Pharmacoeconomics and Outcomes Research (ISPOR), Copenhagen
- Associate Editor, Value in Health

Emma McIntosh

- Member of Glasgow Centre for Population Health Board
- Member of TSC for: Prepare for Kidney Care; Positive Choices Trial; Effectiveness of Surveillance Technologies to Prevent Suicides at High-risk Location Study
- Member of DMEC for CALM Trial

Katherine Simpson

- Member of Nature Markets Investment Standards Working Group (British Standards Institution & Defra)
- Member of Accounting Standards for Stacking & Bundling of Ecosystem Services (Anglian Water and The Environment Bank)
- Member of Biodiversity Standard 'Markets' Working Group (Plan Vivo)

Evi Germeni

- Member of HTAi Patient and Citizen Involvement Interest Group
- Member of Steering Committee & Co-Lead of the Qualitative Workstream for NIHR Methodology Incubator

James Lewsey

- Chartered Statistician, Royal Statistical Society
- Member of TSC for BEAR study, KiVa trial
- Member of DMEC for Drink less app
- Member of NHS Health Scotland Minimum Unit Pricing for alcohol consumption and health harm evaluation advisory group
- Member of NIHR Public Health Research Funding Committee 53

Neil Hawkins

- Vice Chair of the NICE Diagnostics Advisory Committee
- Member of the NICE Antimicrobials Evaluation Committee
- Member of the NICE Medical Technologies Advisory Committee
- Member of the NICE COVID-19 In-Vitro Data Expert Advisory Group
- Chartered Statistician, Royal Statistical Society

Claudia Geue

- Member of Evidence Review Committee for Scottish Health Technologies Group, Healthcare Improvement Scotland
- Member for CSO Panel for Early Postdoctoral Fellowship Scheme

Kathleen Boyd

- Member of Chief Scientist Office 'Health Improvement, Protection and Services' funding committee
- Member of the Scottish Medicines Consortium, voting committee member
- Member of Digital Health Validation Lab Advisory Board, Living Laboratory, University of Glasgow
- Member of Glasgow Oncology Clinical Trials Unit Advisory Board
- Member of TSC for NIHR (134101) SHORTER project "A randomised controlled trial of SHORT duration antibiotic thERapy for critically ill patients with sepsis"
- Member of TSC for NIHR (152682) MANTRA project 'Should we use post-operative antibiotics following surgery for patients with mandible fractures? The MANTRA trial (MANDibular TRauma and Antibiotic use)'
- Review Editor for Frontiers in Medical technology - Regulatory Affairs journal
- Biostatistical Editor board member for Therapeutic Advances in Medical Oncology journal

The Team

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Professor of Health Technology Assessment
Jim Lewsey,
Professor of Medical Statistics
David McAllister,
Professor of Clinical Epidemiology and Medical
Informatics

Senior Researcher Fellow/ Senior Lecturers

Andrew Davies
Evi Germení
Claudia Geue
Eleanor Grieve

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Sayem Ahmed
Pankaj Bahuguna
Janet Bouttell
Elaine Butterly
Giorgio Ciminata
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Ryan Field
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