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<tr>
<td>CRUK</td>
<td>Cancer Research UK</td>
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<td>CSO</td>
<td>Chief Scientists Office</td>
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<td>ESMDM</td>
<td>European Society for Medical Decision Making</td>
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<td>GCPH</td>
<td>Glasgow Centre for Population Health</td>
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<td>GGHB</td>
<td>Greater Glasgow Health Board</td>
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<td>ISPOR</td>
<td>International Society for Pharmacoeconomics and Outcomes Research</td>
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<td>MHRA</td>
<td>Medicines and Healthcare products Regulatory Agency</td>
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<td>MRC</td>
<td>Medical Research Council</td>
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<td>MRC SPHSC</td>
<td>Medical Research Council Social and Public Health Sciences Unit</td>
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<td>NICE</td>
<td>National Institute for Health and Clinical Excellence</td>
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<td>NIHR</td>
<td>National Institute for Health Research</td>
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<td>SEHD</td>
<td>Scottish Executive Health Department</td>
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<td>SIGN</td>
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<td>SMDM</td>
<td>Society for Medical Decision Making</td>
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Introduction
Welcome to the first annual report of the Health Economics & Health Technology Assessment (HEHTA) research group, part of the newly formed inter-college Institute of Health & Wellbeing.

When I arrived at Glasgow in June 2005, Health Economics at Glasgow was in the doldrums, but following the appointment of Dr Elisabeth Fenwick, Dr Paula Lorgelly, and the co-opting of Dr Olivia Wu, a fledgling health economics research team was formed. That was 2006 and in 5 short years the team has gone from strength to strength due to the commitment and energy of everyone involved in the team. With the reorganisation of the University into Colleges, Schools and Institutes, we took the opportunity to reformulate the team, expanding the remit to include not just Health Economics but Health Technology Assessment (HTA) more generally.

Health Economics and Health Technology Assessment covers a broad set of activities relating to the appraisal of health service interventions including policies, procedures, devices, drugs and diagnostics.

Our research team is divided into six programmatic themes, each led by a senior member of the team, and I hope that this report gives you an insight into this evolving structure as well as a clear point of contact for collaborators seeking to establish a joint programme of work with us.

This annual report covers the first year of HEHTA’s activities and I hope will serve as introduction to the 14 full time research staff, full-time PhD students and the support staff who have helped to form HEHTA and who I hope will share the responsibility for shaping the future direction of HEHTA in the years to come. In addition to the usual research projects, publications and presentations, this report also covers HEHTA’s teaching activities through our series of successful CPD courses that attract over 100 research practitioners to Glasgow each year to learn about state of the art methods for HTA.

Most importantly, the report also covers the approval of a new MSc in Health Technology Assessment to be launched in September 2013, directed by Dr Elisabeth Fenwick and delivered by members of the team, which we hope will cement HEHTA within the academic life of Glasgow University and help to train the next generation of HTA practitioners.

Professor Andrew Briggs,  
William R Lindsay  
Chair in Health Economics
Head of Group

Professor Andrew Briggs,
William R Lindsay
Chair in Health Economics

Staff

Dr Kathleen Boyd, Research Fellow
Louise Craig, Research Assistant
Dr Elisabeth Fenwick, Senior Lecturer in
Health Economics
Dr Claudia Geue, Research Associate
Dr Lindsay Govan, Research Associate
Eleanor Grieve, Research Assistant
Seamus Kent, Research Assistant
Kenny Lawson, Research Associate
Dr Jim Lewsey, Senior Lecturer in Medical
Statistics
Dr Emma McIntosh, Reader in Economics of
Population Health
Dr Matt Neilson, Research Associate
Dr Rebecca Shaw, Lecturer in Social Science
Dr Olivia Wu, Reader in Health Economics
Caroline Cecil, Research Administrator
Tracy McComisky, Administrator
Alieda McKinney, Unit Administrator

PhD Students

Sultan Al-Suhaim
Camilla Baba
Jim Crabb
Ele Egharevba
Sarah Holiday
Aileen Murphy
Norah Palmateer
Ana Cristina Perez
Noppcha Singweratham
Zia Ul Haq
Claire Williams

Honorary / Visiting Fellows

Dr Karen Facey
Professor Henry Glick
Professor Neil Hawkins
Dr Karen Ritchie
Staff Profiles
Kathleen Boyd

Having joined the University of Glasgow in 2007, Kathleen is currently employed as a Research Fellow in the HEHTA research group. She has a PhD in Health Economics from the University of Glasgow and an MSc in Economics and Health Economics from the School of Health and Related Research (ScHARR) at Sheffield University. Kathleen works on numerous research projects undertaking economic evaluations within a variety of health care areas such as oncology, child health and smoking cessation interventions. Her research interests are in the areas of early-stage decision analytic modelling, and in designing and undertaking economic evaluations alongside clinical trials.

Andrew Briggs

Andrew holds the William R Lindsay Chair in Health Economics at the University of Glasgow, having joined the University in 2005. Previously, he held the position of Reader in Health Economics at the University of Oxford’s Health Economics Research Centre (HERC). In addition, he spent the academic year 1999/2000 at the Centre for Evaluation of Medicines (CEM) at McMaster University and he remains a research associate of both CEM and HERC.

Andrew has expertise in all areas of health economic evaluation. He has published well over 100 articles in the peer-reviewed literature. He has particularly focused on statistical methods for cost-effectiveness analysis. This includes statistical methods for estimation of parameters for cost-effectiveness models as well as statistical analysis of cost-effectiveness alongside clinical trials. He also has a more general interest in epidemiological methods, in particular the use of prognostic scoring methods for predicting health outcomes and the relationship with heterogeneity in cost-effectiveness.

Andrew recently took a leadership role as co-chair of the Joint Society for Medical Decision Making (SMDM) and International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Task Force on Modelling Methods. The Task Force, which was responsible for producing a set of seven papers covering all aspects of modelling methods applied to medical decision making and health technology assessment. He is also the author of two successful textbooks, one published by OUP entitled Decision Modelling for Health Economic Evaluation, and another published by Wiley entitled Statistical Methods for Cost-Effectiveness Analysis. In addition to his role at the University of Glasgow, he also serves as Editor of the journal Health Economics, Associate Editor for the journal Medical Decision Making, and is on the editorial board of Value in Health.

Liz is an Associate Editor for Pharmacoeconomics and Medical Decision Making and is a member of the board for the Society for Medical Decision Making. She holds a part-time visiting Professor position at the University of Oslo.

Claudia Geue

Claudia joined the HEHTA team in 2008 to undertake her PhD that analysed implications of population ageing and remaining life expectancy on health care expenditure in Scotland. She holds a first degree in Economics from the University of Potsdam, Germany (2004). Prior to taking up her PhD research position at the University of Glasgow, Claudia has worked as a Research Assistant at the Health Economics Research Unit (HERU) at the University of Aberdeen, where she undertook applied health economic research to study behavioural aspects of health care professionals in the NHS related to monetary and non-monetary incentives. She currently holds the position of Research Associate working on a project that is funded by the European Centre for Disease Prevention and Control, looking at the Cost-effectiveness of screening strategies for Hepatitis B, C and HIV infection in different populations.

Claudia’s research interests further include the application of econometric techniques using linked data to answer research questions of socio-economic and geographical patterning of healthcare utilisation and related expenditure.

Elisabeth Fenwick

Having joined the University of Glasgow in 2006, Liz is currently employed as a Senior Lecturer in Health Economics within HEHTA. She was previously employed at the University of York and undertook a post-doctoral fellowship at McMaster University in Canada. She has an MSc and PhD in Health Economics from the University of York and an MSc in Operational Research from Southampton University.

Her research interests centre around the application of decision analytic modelling and simulation methods to Health Technology Assessment, economic evaluation of health care technologies, probabilistic decision analytic modelling, Bayesian decision theory and value of information analysis. Liz contributes to both undergraduate and postgraduate teaching in the Institute of Health & Wellbeing. She leads the Decision Analytic Modelling and Simulation for Evaluation in health (DAMSEL) programme within HEHTA.
Lindsay Govan

Lindsay is a Research Associate within HEHTA. She has a first class BSc (Hons) degree in Statistics (2005) and a PhD in Statistics (2009) from the University of Glasgow, and has been awarded Graduate Statistician status from the Royal Statistical Society.

In 2012, Lindsay was awarded a Medical Research Council Population Health Science Research Fellowship to investigate lifetime costs of diabetes and the impact of potential new interventions for the management of the diabetes. Statistical and health economic models will be used to identify the benefits and costs of different treatments in diabetes management and to estimate the impact of prioritising different groups in terms of health inequalities. Application of the models will be used to guide policy, clinical guidance and decision making, evaluate interventions, and define research areas. This research involves the use of large population datasets through record linkage of national datasets in Scotland.

Additionally, Lindsay has experience of systematic review and meta-analyses of aggregate and individual patient data, and direct, indirect and networked evidence. She has undertaken work in several areas of health research including stroke, hepatitis, cryptorchidism, cancer and obesity.

Eleanor Grieve

Eleanor holds a BA (Hons) in Economics and German from the University of Stirling, a postgraduate diploma in Financial Economics from the School of Oriental and African Studies, University of London and a Masters of Public Health (Merit) from the University of Glasgow. Before joining as a Research Assistant in September 2010, she previously held positions with various non-governmental organisations working in international development. She currently works on projects assisting in health economic evaluations of public health interventions. Eleanor maintains her interest in international development by continuing to do consultancy work in this field.

Seamus Kent

Seamus has a BSc (Hons) in Economics and an MSc in Health Economics, both from the University of York. He is also currently studying for an MSc in Medical Statistics part-time.

Seamus joined HEHTA in October 2010 and has been involved in a variety of projects including pre-trial modelling and the economics of Parkinson’s disease.

Kenny Lawson

Kenny is an Early Career Researcher within HEHTA, and in June 2011 he took up a jointly-funded post with the University of Glasgow and the MRC’s Social and Public Health Sciences Unit (SPHSU). This role seeks to develop generic methods for the economic evaluation of public health interventions, and also assess the value for money of key policy initiatives. Currently, the major projects are concerned with housing and regeneration interventions (GoWell) and the primary prevention of cardiovascular disease. The latter will apply the recently created Scottish CVD Policy Model, which was built over the previous two years and funded by the Chief Scientists Office.

Prior to academia, Kenny worked across a wide range of applied areas in economics and in different institutions, including Government (environment and rural development), Banking (Royal Bank of Scotland), International Development (e.g. in Tanzania and Bangladesh) and macroeconomic consultancy (Oxford Economics).

Jim Lewsey

Jim is a Senior Lecturer in Medical Statistics and joined the University of Glasgow in 2007 having previously held posts at the London School of Hygiene and Tropical Medicine (2003-2007), the University of Otago (2001-2003), the Eastman Dental Institute-UCL (1998-2001) and the University of Glasgow (1996-1998). He has a BSc (Hons) in Statistics and Operational Research from Coventry University and a PhD in Statistics from Glasgow Caledonian University. He was awarded Chartered Statistician status from the Royal Statistical Society in 2010 and Chartered Scientist from the Science Council in 2012.

His personal research interests stem from methodological challenges faced when analysing observational and experimental medical data and have included prognostic model development in the presence of missing data, continuous outcome monitoring of long-term outcomes, modelling dental caries data, and the design of cluster randomised trials. His current interests include competing risks and multi-state survival analysis. Jim leads the Statistical Analysis of Linked Health Data (SALHDa) programme within HEHTA.

Jim teaches medical statistics on the Masters in Public Health and intercalated BSc (Med Sci) degrees. He has a keen interest in how best to teach statistics to medical students and health care researchers and in 2011 hosted the Burwells Annual Meeting for Teachers of Medical Statistics in Glasgow.

Emma McIntosh

Emma joined HEHTA in May 2011 as programme leader on the Economics of Population Health. She has an MSc in Health Economics and a PhD in Economics. Prior to joining HEHTA she worked at HERU at the University of Oxford where she worked on a range of economic evaluations in the areas of Parkinson’s Disease and public health interventions.

Emma’s methodological interests are in the area of economic evaluation, evaluating public health interventions, stated preference methods and cost benefit analysis more generally. She recently co-authored a book entitled ‘Applied Methods of Cost-Benefit Analysis in Health Care’ as part of Oxford University Press’s Handbooks in Health Economic Evaluation series. She has previously held posts at HERU at the University of Aberdeen, the Health Services Research Unit (HSRU) at the University of Aberdeen and the Personal Social Services Research Unit (PSSRU) at the University of Kent.
Emma has recently been awarded a Senior Research Fellowship with Parkinson’s UK. The title of the fellowship is ‘The Economics of Parkinson’s: Advancing the scope of costs and benefits’. Emma is on the editorial board of ‘The Patient’ Journal and is on the advisory board for projects including ICECAP and Capabilities projects.

Matt Neilson

Matt joined HEHTA in October 2010 and has since been involved in verifying, optimising and improving the numerical robustness of various computer simulation models. After completing his PhD in 2008, Matt began a collaborative six-month pilot project between the Department of Mathematics at the University of Strathclyde and the Beatson Institute for Cancer Research in Glasgow. The research involved developing and simulating a computational model for cell migration, and after a successful initial phase Matt was awarded an MRC Discipline Hopping Grant to refine and enhance his existing model.

Rebecca Shaw

Rebecca joined the University of Glasgow in May 2007. She has previously held research posts at the Universities of York and Strathclyde. She has an MA (Hons) in Sociology with Gender Studies (University of Edinburgh), an MSc in Social Research (University of Edinburgh) and a PhD in Sociology (University of York).

Rebecca’s research focuses on the application of qualitative methods of data collection and analysis (including conversation analysis) to the evaluation of complex public health interventions and to the exploration of healthcare interactions.

She contributes to both undergraduate and postgraduate teaching in the School of Medicine and the Institute of Health & Wellbeing. She is a member of the British Sociological Association and an affiliated member of the Feminist Conversation Analysis Unit. She convenes the Qualitative Research Network at the University of Glasgow.

Olivia Wu

Olivia is a Reader in Health Economics and leads the Evidence Synthesis Programme within HEHTA. She has a BSc (Hons) in Pharmacy, an MSc in Clinical Pharmacology and PhD in Public Health and Health Economics.

Olivia’s research interest in health technology assessment methodologies focuses on the areas of evidence synthesis (including systematic review and meta-analysis of aggregate and individual patient data; direct, indirect and networked evidence), risk prediction modelling and economic evaluation. Currently she is leading a project on cost-effectiveness of screening for hepatitis B, C and HIV, funded by the European Centre for Disease Prevention and Control.

In addition to her research, Olivia serves as a member of Technology Appraisal Committee for the National Institute for Health and Clinical Excellence (NICE) and the Health Service and Population Health Research Committee for the Chief Scientist Office (CSO) Scotland. She is also health economics advisor to the Scottish Intercollegiate Guidelines Network (SIGN).
**PhD Students**

**Awarded in 2012**

**Kathleen Boyd** – ‘Employing early decision analytic modelling to inform economic evaluation in health care theory and practice’. Supervisors: Elisabeth Fenwick 50%, Andrew Briggs 50%

**Claudia Geue** – ‘Population ageing in Scotland – implications for healthcare expenditure. Supervisors: Andrew Briggs 50%, Jim Lewsey 50%

**Submitted in 2012**

**Louise Craig** – ‘The impact of implementing a complex intervention in stroke’. Supervisors: Olivia Wu 70%, Peter Langhorne 30%

**Aileen Murphy** – ‘Economic evaluations for health technologies with an evolving evidence base: a case study of transcatheter aortic valve implantation’ 
Supervisors: Elisabeth Fenwick 50%, Andrew Briggs 50%

**In progress**

**Sultan Al-Suhaim** – ‘The use of evidence based pharmacotherapy for cardiovascular disease in Scotland’
Start date: 2009 Anticipated submission date: November 2013 
Supervisors: Jim Lewsey 50%, John McMurray 50%

**Camilla Baba** – ‘Valuing the health and wellbeing aspects of community empowerment using economic evaluation techniques’.
Start date: 2011 Anticipated submission date: 2014 
Supervisors: Emma McIntosh 70%, Carol Tannahill 30%

**Jim Crabb** - ‘Mental health issues and primary health care worker training in Malawi’
Start date: 2011 Anticipated submission date: 2016
Supervisors: Rebecca Shaw 50%, Jacqueline Atkinson 50%

**Efe Egharevba** - ‘Opportunity or exploitation : clinical research in developing countries’
Start date: 2011 Anticipated submission date: 2016
Supervisors: Rebecca Shaw 50%, Jacqueline Atkinson 50%

**Sarah Holiday** – ‘Interaction between people and services in the Fifth Wave of public health.’
Start date: 2011 Anticipated submission date: 2016
Supervisor: Rebecca Shaw 25%, Phil Hanlon 75%

Start date: 2008 Anticipated submission date: 2013
Supervisors: Andrew Briggs 50%, Elisabeth Fenwick 50%

**Norah Palmateer** – ‘Epidemiological methods to assess and monitor the effectiveness of Hepatitis C prevention initiatives in Scotland’.
Start date: 2008 Anticipated submission date: 2013
Supervisors: Olivia Wu 30%, David Goldberg 30%, Sharon Hutchinson 40%

**Ana Cristina Perez** – ‘Symptoms, signs, quality of life and hospital admission in heart failure’.
Start date: 2011 Anticipated submission date: 2014
Supervisors: Jim Lewsey 50%, John McMurray 50%

**Noppcha Singweratham** – ‘Cost-effectiveness analysis of a disease management programme for Type 2 Diabetes Mellitus in Thailand’.
Start date: 2009 Anticipated submission date: 2013
Supervisor: Andrew Briggs 100%

**Claire Williams** – ‘Demonstrating the potential of multi-state survival models for enhancing epidemiological and health economic modelling’.
Start date: 2011 Anticipated submission date: 2014
Supervisors: Jim Lewsey 34%, Andrew Briggs 33%, Danny Mackay 33%
Honorary Fellows

Karen Facey

Karen Facey is an Honorary Senior Research Fellow in the HEHTA research group. She is a Chartered Statistician, Honorary Member of the Faculty of Public Health and Fellow of the Royal Society of Medicine and works as an evidence based health policy consultant. She is a Non Executive Director of NHS Health Scotland, a member of Scottish Health Technologies Group and a member of the MHRA Committee on the Safety of Devices. Karen did her first degree at City University and PhD at the University of Reading, specialising in interim analysis of clinical trials. She has worked as a statistician in the pharmaceutical industry and the UK medicines regulatory agency. In the last 12 years she has developed a broader interest in evidence based decision making in healthcare. In 2000, she established the first national HTA Agency in Scotland, which set up the Scottish Medicines Consortium. She has been Chair of the HTAi Policy Forum and its Interest Group on Patient/Citizen Involvement in HTA and she chaired the Government committee that resulted in the current funding formula to allocate resources to NHS Scotland Health Boards.

Henry Glick

Henry is a Professor of Medicine in the Division of General Internal Medicine at the University of Pennsylvania. Henry received an MA and PhD in Public Policy Analysis from the University of Pennsylvania. He has more than 20 years of experience in conducting economic assessments of medical interventions, with a specialist interest in economic assessments conducted as part of clinical trials. In addition to his main affiliation, he also associated with the Wharton School, the Centre for Health Incentives, the Leonard Davis Institute of Health Economics and the Centre for Clinical Epidemiology and Biostatistics, at the University of Pennsylvania.

Neil Hawkins

Neil is a Vice President leading the global Health Economics practice at ICON PLC following its acquisition of Oxford Outcomes, where he was a member of the board of directors. He has received Master’s Degrees in Health Economics (York) and Applied Statistics (Sheffield Hallam) and a BSc and PhD in Pharmacology. Neil is also an Honorary Professor at the University of Glasgow, an Honorary Visiting Fellow at the University of York, and a Chartered Statistician (Royal Statistical Society, UK).

Neil has experience in the academic, research based pharmaceutical, and consultancy sectors. Over the last ten years, Neil has focused on health technology assessment, specializing in evidence synthesis and decision-analytic modeling. Previously he contributed to basic life science, clinical and epidemiological research. He is active in methodological research and has recently published articles discussing methods for indirect comparisons, cost-effectiveness modelling, value based pricing and the placebo effect. He was also a member of the ISPOR task force considering indirect comparisons and is heading a project sponsored by the Pharmaceutical Oncology Initiative reviewing methods for synthesis and survival modeling in the evaluation of oncology products.

Karen Ritchie

Karen Ritchie has a BSc from University of Glasgow and undertook her PhD at the MRC Toxicology Unit, Surrey. She worked in lab based cancer research before developing a career in health services research including undertaking a Masters in Public Health. Following research posts at the University of Glasgow and the MRC Institute of Hearing Research she joined the NHS in 2002 to manage a team of health services researchers in the synthesis of evidence to support a range of activities including production of health technology assessments. Karen currently leads the Knowledge and Information Unit within Healthcare Improvement Scotland which provides information, research and knowledge management support across the organisation and develops standards and indicators to support healthcare improvement. Karen is a member of the NICE Accreditation Advisory Committee.
The HEHTA research is organised around six main research programmes.

Economic Evaluation alongside Clinical Trials

Programme lead: Professor Andrew Briggs

The Economic Evaluation in Clinical Trials Programme encompasses all research work associated with conducting an economic appraisal as part of a clinical trial. Although modelling methods may still be required to provide a comprehensive appraisal, the characterising feature is the inclusion of an economic component to the trial and the availability of experimental data on both costs and effects of treatment. The following projects are ongoing cost-effectiveness studies alongside clinical trials.

Short Course Oncology Therapy (SCOT)

Funded by MRC, this trial examines the possible effects of shortening the standard course of adjuvant chemotherapy from 24 to 12 weeks. The planned cost-effectiveness analysis will explore whether short-course chemotherapy offers value for money, or whether the loss of effectiveness associated with the shorter treatment duration means that standard treatment should be maintained. The trial is led by researchers at Glasgow’s Beatson Institute for Cancer Research.

HEHTA contact: Kathleen Boyd

Ankle Injury Management (AIM) trial

Funded by the NIHR HTA programme, this study hypothesises that the application of the “Close Contact Casting technique (CCC)” for displaced ankle fractures in older adults results in an equivalent outcome compared to the standard care of open reduction internal fixation (ORIF) in terms of function, complications, quality of life and patient satisfaction with treatment.

HEHTA contact: Andrew Briggs

Incentives for smoking cessation in pregnancy (CPIT)

Smoking cessation in pregnancy trial

Funded by a consortium including CSO, GCPH and Greater Glasgow Health Board, this study examines the use of financial incentives to encourage pregnant mothers to stop smoking during their pregnancy. The planned economic evaluation will relate the costs of the financial incentive intervention to the benefits in terms of confirmed cessation rates and the long term impact on both maternal health and the health of her offspring.

HEHTA contact: Kathleen Boyd

Port-a-cath and Hickman line devices for chemotherapy delivery

Funded by the CSO, this pilot trial aims to gather preliminary data on the use of two venous catheter devices in chemotherapy delivery. In addition to determining feasibility, a pre-trial cost-effectiveness analysis based on the pilot data and existing evidence will be carried out to examine the potential cost-effectiveness of the devices and the associated uncertainty.

HEHTA contact: Olivia Wu

Surveillance in Barratt’s Oesophagus (BOSS)

Funded by the NIHR HTA programme, this study examines whether two-yearly endoscopic surveillance or endoscopy as needed only leads to superior performance in terms of the detection of cancer (oesophageal, gastric or all cancers). The planned economic evaluation includes a model for the cost-effectiveness of planned screening with endoscopy.

HEHTA contact: Andrew Briggs

A Very Early Rehabilitation Trial (AVERT)

Funded by the National Health and Medical Research Council of Australia, Chest Heart and Stroke Scotland and the Stroke Association, this is a large-scale international trial to evaluate the effect of very early mobilisation in reducing death, disability and complications, and improving quality of life in patients post stroke. The cost-effectiveness of this complex intervention will be evaluated. This trial is led by National Stroke Research Institute in Melbourne.

HEHTA contact: Olivia Wu

Treatment of fibroids with either embolism or myomectomy (FEMME)

Funded by the NIHR HTA programme, this trial examines the clinical and cost-effectiveness of uterine artery embolisation in comparison to myomectomy in the treatment of symptomatic fibroids. This trial is led by the University of Oxford.

HEHTA contact: Olivia Wu

Gabapentin for the management of chronic pelvic pain (GaPP)

Funded by the CSO, this pilot trial aims to determine the feasibility and acceptability of undertaking a large-scale randomised controlled trial on the use of Gabapentin in women with chronic pelvic pain. The planned pre-trial cost-effectiveness analysis will examine the potential cost-effectiveness of Gabapentin and its associated uncertainty surrounding the results, in order to support the design of the future large-scale trial. This trial is led by the University of Edinburgh.

HEHTA contact: Olivia Wu
Economic Evaluation of deep brain stimulation in Parkinson’s (PD_SURG)

Funded by the MRC and Parkinson’s UK, this is a large, pragmatic, multicentre “real-life” randomised trial to evaluate the role of surgery as therapy for Parkinson’s. The fundamental question being addressed in this trial is: Does early surgery provide more or less effective long-term control than medical therapy (with surgery deferred for as long as possible) and is this cost-effective?

HEHTA contact: Emma McIntosh

Bronchiolitis in Infancy Discharge Study (BIDS) – Economic evaluation of early discharge of infants with bronchiolitis

BIDS is funded by the NIHR. The number of hospital admissions for bronchiolitis has doubled over the past 25 years whilst mortality has remained the same, suggesting that changes in clinical practice and not viral pathogenicity underlie this increase. Clinicians are responding to this additional demand by looking at alternative methods of care delivery in relation to the oxygen saturation discharge protocol. The economic analysis will estimate the incremental cost and effectiveness of the 90% oxygen saturation discharge protocol compared to the standard 94% oxygen discharge procedure in terms of health, social care and societal costs as well as the clinical and QOL outcome measures. The economic analysis will also take into consideration the ‘seasonality’ of the disease and the economic impact of this with regard to availability of ward space/beds during peak hospital times.

HEHTA contact: Emma McIntosh

A randomised controlled trial of the effectiveness of PDSAFE to prevent falls among people with Parkinson’s: PDSAFE

PDSAFE is funded by the NIHR HTA programme. PDSAFE will investigate whether people with Parkinson’s who undertake a personalised programme ‘PDSAFE’ incur fewer falls and hence have an improved quality of life and less health care costs than people who do not undertake PDSAFE. Additional economic analyses will explore the extent to which carer burden is reduced by PDSAFE outcomes.

HEHTA contact: Emma McIntosh

Football Fans in Training (FFIT): a randomized controlled trial of a gender sensitive weight loss and healthy living programme delivered to men aged 35-65 by Scottish Premier League football clubs.

Funded by the NIHR Public Health Research Programme this study will assess the effectiveness and cost-effectiveness of a group based weight loss and healthy living programme, specifically designed to engage men who are often reluctant to join existing weight loss programmes. A within trial economic evaluation will relate the resources associated with providing the intervention as well as medication use and health care consultations to the benefits in terms of numbers achieving at least 5% weight loss and changes in utility score. A trial protocol for the study has been published and is available here.

HEHTA contact: Eleanor Grieve

Evidence Synthesis

Programme lead: Dr Olivia Wu

The Evidence Synthesis Programme encompasses all research work associated with systematic review, and meta-analysis of direct, indirect and network evidence. The following are recently completed or ongoing evidence synthesis projects:

Estimating Cost Effectiveness for Screening Strategies for Hepatitis B, C and HIV Infection in Different Populations in Europe

Funded by the European Centre for Disease Prevention and Control, the first phase of the project involves the systematic reviewing of all existing studies and critiquing economic models that evaluated the cost-effectiveness of Hepatitis B, Hepatitis C and HIV screening. The second phase of the project involves the development of a cost-effectiveness screening model and toolkit to be used across Europe.

HEHTA contacts: Olivia Wu and Elisabeth Fenwick

External catheters and totally implanted ports for the delivery of chemotherapy

In order to support the design of a pilot trial on the use of external catheters and totally implanted ports for the delivery of chemotherapy, a systematic review was conducted to evaluate the complication rates associated with external catheters compared with totally implantable ports in patients undergoing chemotherapy. The results of this study highlighted the gaps in the evidence and provided the justification for a randomised controlled trial. Subsequently, a pilot trial was funded by the CSO Scotland, and more recently, a full large-scale randomised controlled trial has been funded by NIHR HTA.

HEHTA contact: Olivia Wu

Overview of reviews on pharmacological interventions for the eradication of Helicobacter pylori

Commissioned by the Scottish Intercollegiate Guidelines Network, this study will systematically review all existing systematic reviews on pharmacological interventions for the eradication of Helicobacter pylori. Where appropriate, a network meta-analysis will be carried out to determine the relative clinical effectiveness of all interventions.

HEHTA contact: Olivia Wu
Population Health is concerned with the study of social and environmental influences on physical and mental health and well-being. It is widely acknowledged that ‘up-stream’ influences such as early life experiences, the social and economic conditions in which people live and environmental exposures affect wellbeing. Population health research aims to improve the health of the public through clinical, public health interventions or dental public health including those that may be delivered outside conventional health services. The Economics of Population Health (EPH) programme at HEHTA is concerned with the development of methods and related empirical work associated with the economic evaluation of such ‘up-stream’ population health interventions. HEHTA is involved in a number of population health evaluations as follows:

**GoWell**

GoWell is a collaborative partnership between the Glasgow Centre for Population Health (GCPH), the University of Glasgow, and the MRC/CSO Social and Public Health Sciences Unit and is sponsored by Glasgow Housing Association, the Scottish Government, NHS Health Scotland and NHS Greater Glasgow and Clyde. GoWell is a research and learning programme that aims to investigate the impact of investment in housing, regeneration and neighbourhood renewal on the health and wellbeing of individuals, families and communities over a ten-year period. The programme aims to establish the nature and extent of these impacts, to learn about the relative effectiveness of different approaches, and to inform policy and practice in Scotland and beyond. An economic evaluation of GoWell costs and outcomes is ongoing.

**THRIVE**

Trial of Healthy Relationship Initiatives for the Very Early-years (THRIVE). Funded by the NIHR, THRIVE is a Three-Arm Randomised Control Trial for Mothers Identified as Vulnerable in Pregnancy and their Babies who are at High Risk of Maltreatment. Applied economic evaluations in the area of home visiting and parenting, many of which have been conducted in the have suffered from diverse economic objectives and methodological problems including the lack of a societal perspective and limited cost analysis. THRIVE trial will include a comprehensive economic evaluation which will assess the costs and outcomes associated with the delivery of each intervention and treatment as usual from the NHS and personal social services perspective favoured by NICE. In keeping with the population health nature of this trial, a broader societal perspective will also be adopted to allow for the possibility of costs and outcomes beyond the NHS and PSS such as housing, education, employment and justice. The cost-effectiveness will be assessed by comparing the additional costs associated with each of the interventions to the outcomes achieved in the study and those achievable in the longer term.

**Evaluation of the New Orleans Intervention Model for Infant Mental Health in Glasgow (BeST)**

Funded by the CSO and NSPCC this study investigates the New Orleans Intervention Model (NIM) for maltreated children in the Scottish context. The NIM provides intensive assessment and treatment for families of maltreated preschool children in foster care, with recommendations to court about adoption or permanent return to birth families. An economic model will be built and populated with data from the trial to assess cost-effectiveness using the Infant Toddler Social Emotional Assessment measure of child mental health. The aim of the economics component is to explore whether the NIM is likely to be cost-effective in Glasgow and, if so, what design parameters are required for the definitive Phase III trial.

**HEHTA contact: Kathleen Boyd**

**Woods In and Around Towns (WIAT)**

Funded by the NIHR Pharmaceutical Panel, WIAT aims to answer the research question: How effective is Scotland’s Forestry Commission woodland improvement programme at improving psychological wellbeing in deprived communities? In this project, three ‘active’ intervention sites for the Forestry Commission Scotland’s woodland intervention programme will be matched with three control sites. The communities adjacent to all six areas will be sampled to assess the potential impact of the intervention programme on wellbeing. HEHTA will conduct the economic analysis of the programme.

**HEHTA contact: Andrew Briggs**

**Dental Population Health Projects**

Childsmile is a national programme designed to improve the oral health of children in Scotland and reduce inequalities both in dental health and access to dental services. Childsmile is currently being evaluated by researchers at the University of Glasgow Dental School. HEHTA are working with the Dental school on evaluating the costs of the Childsmile Nursery and School programme and consequently estimating the economic impact of reducing the cost of caries. HEHTA are also working with the Dental School on developing health economics within dentistry more generally.

**HEHTA contact: Emma McIntosh**
HEHTA provided a continuing professional development course on parametric survival modelling at the ESMDM 2012 conference. This programme encompasses all research work in HEHTA that is associated with statistical and epidemiological analysis of linked health data sets. The following projects are recently completed or ongoing:

**Cardiovascular Disease Primary Prevention Policy Model**

Funded by CSO, this work built a model that is capable of evaluating the impact of risk factor changes on life expectancy, quality adjusted life expectancy and health service costs. The data set used was the Scottish Heart Health Extended Cohort (SHHEC) linked to Scottish Morbidity Records (SMR) and deaths.

HEHTA contact: Kenny Lawson, Jim Lewsey or Andrew Briggs

**Scottish Alcoholic Liver disease Evaluation of epidemiology and costs of first and subsequent hospital admissions (SCALE)**

Funded by CSO and starting in Feb 2013, this work will study the epidemiology of first alcoholic liver disease (ALD) hospitalisations. Alcoholic liver disease (ALD) is a significant burden on health. Using this cohort of patients, trends over time, readmissions, mortality and economic burden will be analysed taking into account different subgroups (sex, age, socio-economic deprivation, geographical regions, comorbidities). The epidemiological research will feed into the development of an ALD health economic model. The data set to be used will be linked Scottish Morbidity Records (SMR01, SMR04, SMR06) and deaths.

HEHTA contact: Claudia Geue, Jim Lewsey or Andrew Briggs

**Statistical Analysis of Linked Health Data (SALHDa)**

**Statistical support for NHS Health Scotland**

Funded by NHS Health Scotland, this work involves providing statistical support for a number of NHS projects, including evaluation of Keep Well and Monitoring and Evaluating Scotland’s Alcohol Strategy (MESAS). The data sets being used involve market research based alcohol sales estimates, prescribing rates, SMR and deaths at a population and/or health board level.

HEHTA contact: Claudia Geue or Jim Lewsey

**Population ageing in Scotland – Implications for healthcare expenditure**

Funded through an MRC studentship, this 3 year PhD project (2009-2012) utilised the Scottish Longitudinal Study (SLS), linked to hospital admission records to estimate the effect that population ageing and remaining life time had on expenditure for acute inpatient care. It also investigated the use of two different methods in order to project future healthcare expenditure and looked specifically at the effect of socio-economic status on expenditure for hospital care at the end of life. Follow-on research from this project will be concerned with regional differences in healthcare utilisation and costs at the end of life.

HEHTA contact: Claudia Geue

**Costs and complications of diabetes**

Funded by the Wellcome Trust through the Scottish Health Informatics Programme (SHIP), this 3 year project (2009-2012) aimed to carry out epidemiologic and health economic analysis of diabetes by linking the Scottish Care Information – Diabetes Collaboration (SCI-DC) database (a dynamic national register of diagnosed cases of diabetes in Scotland) with information on hospital admissions obtained using Scottish Morbidity Records, and death records from the General Register Office for Scotland. This project has been extended through funding by a three-year MRC fellowship (2012-2015). The main aims of the fellowship are to develop incidence-based models for both Type 1 and Type 2 diabetes in order to estimate the lifetime costs of diabetes and investigate the impact of potential new interventions for the management of diabetes. This work will form a policy model to plan future health care for people with diabetes.

HEHTA contact: Lindsay Govan

**Multi-State Survival Modelling with Routine Data**

In addition to funded research projects, the programme also includes methodological development in the area of linked health data analysis. This includes multi-state survival modelling.

HEHTA contact: Claire Williams

In addition to funded evaluations using models, the programme also covers more methodological work. Members of the programme were involved in the recent ISPOR-SMDM Modeling Good Research Practices Task Force. Recommendations are available online from both ISPOR and SMDM. The DAMSEL Programme encompasses research associated with conducting an evaluation using modelling or simulation methods. The following are examples of ongoing studies or recently completed projects involving DAMSEL:

**Infertility services waiting time model**

This discrete event simulation models the operational characteristics of IVF services in Scotland with the aim of predicting the possible impacts on waiting times of various changes to the delivery of these services.

HEHTA contact person: Elisabeth Fenwick
Estimating Cost Effectiveness for Screening Strategies for Hepatitis B, C and HIV Infection in different populations in Europe

Fundied by the European Centre for Disease Prevention and Control, this study involves the development of a model and toolkit to be used across Europe to assess the impact and cost-effectiveness of screening interventions for Hep B, Hep C and HIV infection.

HEHTA contact: Olivia Wu, Elisabeth Fenwick

Football Fans in Training (FFIT): a randomized controlled trial of a gender-sensitive weight loss and healthy living programme delivered to men aged 35-65 by Scottish Premier League football clubs.

Fundied by the NIHR Public Health Research Programme this study will assess the effectiveness and cost-effectiveness of a group-based, weight loss and healthy living programme, specifically designed to engage men who are often reluctant to join existing weight loss programmes. In addition to a within trial economic evaluation of FFIT, a model will be developed to link short term outcomes from the RCT to potential longer term impacts on health.

HEHTA contact: Eleanor Grieve

Transcatheter Aortic Valve Implantation – Access with Evidence Development case study

This project developed from a workshop in “coverage with evidence development” held in Glasgow in 2008. A conceptual model was constructed to assess the costs, effectiveness and cost-effectiveness of TAVI in comparison to the alternatives for three risk sub-groups. The initial analysis was based on the limited data available within the literature. Subsequently, the model has been updated and re-analysed as evidence about the use of TAVI has accrued.

HEHTA contact: Elisabeth Fenwick, Aileen Murphy

Transcatheter Aortic Valve Implantation – Value of Information project

The TAVI model was subsequently employed in a separate project to assess the value of information associated with a proposed UK based trial of TAVI for medium risk patients with aortic stenosis who would be considered for standard aortic valve replacement in the absence of TAVI.

HEHTA contact: Elisabeth Fenwick, Aileen Murphy

Universal Health Checks – pre-study modelling

This decision model was constructed to assess the potential impact (in terms of cardiovascular disease (CVD) events avoided), costs and expected cost-effectiveness of a universal screening programme for CVD compared with the established targeted screening programme. In addition, results from the model were used to estimate the sample size that would be required for a pilot trial of the programme and the expected cost of such a trial.

HEHTA contact: Eleanor Grieve

The value of fludeoxyglucose (FDG) positron emission tomography/computerised tomography (PET/CT) in pre-operative staging of colorectal cancer: a systematic review and economic evaluation

Fundied by the NIHR HTA programme this project assessed the use of PET/CT compared with standard strategies for pre-operative staging of colorectal cancer. Models were constructed to represent the patient pathways and different diagnostic approaches associated with primary colon cancer, primary rectal cancer, recurrent colon cancer, recurrent rectal cancer and metastatic colorectal cancer. Results from each of the models identified the likely impact of PET/CT in terms of diagnostic accuracy, patient management, morbidity, mortality and cost-effectiveness. In addition, a value of information analysis identified areas where future research may be potentially worthwhile. Further details and a copy of the report are available here.

HEHTA contact: Kathleen Boyd

A pre-trial model of coronary guidewire assisted cardiography for Non-ST-Elevated Myocardial Infarction (NSTEMI) patients

Fundied by the CSO, this project was to develop an early cost-effectiveness model to assist in the design of a subsequent trial. The measurement of fractional flow reserve (FFR) using a coronary guidewire with a pressure sensor has the potential to improve the diagnostic accuracy of coronary artery disease (CAD) and is now an established technique in the invasive management of people with stable CAD. The question this model seeks to address is whether this technique might also have benefits for NSTEMI patients and what would be the most efficient trial design to establish the effectiveness and cost-effectiveness of FFR in this patient group.

HEHTA contact: Andrew Briggs

Incorporating Perspectives and Experiences

Programme lead: Rebecca Shaw

Within the ‘Incorporating Perspectives and Experiences’ Programme, research focuses on the application of qualitative methods of data collection and analysis, including conversation analysis, to the evaluation of interventions to improve health, to exploring people’s health and illness experiences across a range of clinical areas and to examining interactions and communication between health professionals and patients.

The following projects are ongoing.

Delivering shared decision-making: strategies for facilitating patient involvement in making decisions in neurology clinics.

Fundied by the NIHR Health Services and Delivery Research programme, this project uses the qualitative method of conversation analysis to analyse communication between clinicians and patients in recordings of appointments at two clinical neuroscience centres (Sheffield and Glasgow). The research...
aims to provide evidence about how patient choice is implemented and to identify the most effective communication strategies for decision-making. The project is a collaboration between the Universities of Sheffield, Glasgow and York.

HEHTA contact: Rebecca Shaw

Cancer And Venous Access (CAVA) - a three-way randomised controlled trial of long-term venous access devices for the delivery of chemotherapy: ports versus tunnelled central lines versus percutaneous inserted central catheters.

Funded by the NIHR HTA, this trial examines the effectiveness and cost-effectiveness of three long-term venous access devices for the delivery of chemotherapy. The qualitative component comprises focus group discussions and interviews in order to facilitate recruitment to the study and to explore the attitudes of clinical staff and patients towards the three venous access devices. The trial is led by researchers at Glasgow’s Beatson Institute for Cancer Research.

HEHTA contact: Rebecca Shaw (Qualitative), Olivia Wu (Cost-effectiveness)
## Summary of HEHTA Research Projects

<table>
<thead>
<tr>
<th>Project title</th>
<th>Funder name</th>
<th>Acronym</th>
<th>Research Programme</th>
<th>Project Duration</th>
<th>Total Project Value</th>
<th>HEHTA Share of Total Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of the New Orleans intervention Model for Infant Mental Health in Glasgow</td>
<td>CSO NSPCC</td>
<td>BEST</td>
<td>EPH</td>
<td>2011-2013</td>
<td>£325,000</td>
<td>£25,500</td>
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<tr>
<td>Infertility Services Waiting time model</td>
<td>Infertility Network Scotland</td>
<td>DAMSEL</td>
<td>2012-2012</td>
<td>£52,000</td>
<td>£52,000</td>
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<td>Universal Health Checks</td>
<td>Scottish Government</td>
<td>DAMSEL</td>
<td>2011-2012</td>
<td>£20,000</td>
<td>£20,000</td>
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<tr>
<td>The value of Positron Emission Tomography (PET) in pre-operative staging of colorectal cancer</td>
<td>NIHR HTA</td>
<td>PET CT</td>
<td>DAMSEL</td>
<td>2009-2010</td>
<td>£270,000</td>
<td>£90,000</td>
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<tr>
<td>Glasgow community health and wellbeing research and learning programme</td>
<td>Scottish Government, NHS Health Scotland GHA, GCPH</td>
<td>Go Well</td>
<td>EPH</td>
<td>2006-2014</td>
<td>£4,200,000</td>
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<tr>
<td>Cost-effectiveness of fractional flow reserve measurement in NSTEMI</td>
<td>CSO</td>
<td>DAMSEL</td>
<td>2011-2011</td>
<td>£26,000</td>
<td>£26,000</td>
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<tr>
<td>Estimating Cost Effectiveness for Screening in Europe</td>
<td>ECDC</td>
<td>DAMSEL/ ES</td>
<td>2011-2013</td>
<td>£215,000</td>
<td>£215,000</td>
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<td>Value of information analysis of TAV</td>
<td>NIHR</td>
<td>TAVI</td>
<td>DAMSEL</td>
<td>2011-2011</td>
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<td>£10,000</td>
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<td>SCOT (Short course Oncology Therapy)</td>
<td>MRC</td>
<td>SCOT</td>
<td>EEAECT</td>
<td>2006-2014</td>
<td>£1,116,000</td>
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<td>AIM (Ankle Injury Management)</td>
<td>NIHR HTA</td>
<td>AIM</td>
<td>EEAECT</td>
<td>2010-2014</td>
<td>£70,000</td>
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<td>BOSS Trial</td>
<td>NIHR</td>
<td>BOSS</td>
<td>EEAECT</td>
<td>2009-2022</td>
<td>£103,000</td>
<td>£103,000</td>
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<tr>
<td>Incentives for smoking cessation in pregnancy :</td>
<td>CSO/GGP/HGGHB</td>
<td>CPIT</td>
<td>EEAECT</td>
<td>2010-2012</td>
<td>£107,000</td>
<td>£52,000</td>
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<tr>
<td>Cryotherapy Trial</td>
<td>Cancer Research UK</td>
<td>CROP</td>
<td>EEAECT</td>
<td>2012-2013</td>
<td>£56,000</td>
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<tr>
<td>FEMME</td>
<td>NIHR HTA</td>
<td>FEMME</td>
<td>EEAECT</td>
<td>2011-2018</td>
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<td>A Very Early Rehabilitation Trial (AVERT) UK</td>
<td>Stroke Association CHSS</td>
<td>AVERT</td>
<td>EEAECT</td>
<td>2011-2012</td>
<td>£270,000</td>
<td>£54,000</td>
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<tr>
<td>FFIT : Football Fans in Training</td>
<td>NIHR</td>
<td>FFIT</td>
<td>EEAECT</td>
<td>2011-2013</td>
<td>£392,000</td>
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<tr>
<td>Port-a-cath and Hickman line devices for chemotherapy delivery</td>
<td>CSO</td>
<td>EEACT</td>
<td>2010-2013</td>
<td>£44,000</td>
<td>£44,000</td>
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<tr>
<td>Pelvic pain in women (GAPP)</td>
<td>SEHD</td>
<td>GAPP</td>
<td>EEAECT</td>
<td>2012-2013</td>
<td>£40,000</td>
<td>£40,000</td>
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<tr>
<td>Bronchiolitis of Infancy Discharge Study (BIDS)</td>
<td>NIHR HTA</td>
<td>BIDS</td>
<td>EEAECT</td>
<td>2011-2015</td>
<td>£486,000</td>
<td>£90,000</td>
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<tr>
<td>Randomised Trial to Evaluate the role of surgery as treatment for Parkinson’s PD SURG</td>
<td>MRC Parkinson’s UK</td>
<td>PD Surg</td>
<td>EEAECT</td>
<td>2012-2013</td>
<td>£25,530</td>
<td>£15,530</td>
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<tr>
<td>A Randomised controlled trial of the effectiveness of POSSAFE to prevent falls among people with Parkinson’s</td>
<td>NIHR</td>
<td>PD Safe</td>
<td>EEAECT</td>
<td>2013-2016</td>
<td>£2,500,000</td>
<td>£65,000</td>
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<tr>
<td>Three-Arm Randomised Control Trial for Mothers Indentified as Vulnerable in Pregnancy and their Babies who are at high risk of maltreatment</td>
<td>NIHR</td>
<td>THRIVE</td>
<td>EEAECT/EPH</td>
<td>2012-2017</td>
<td>£1,900,000</td>
<td>£316,000</td>
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<tr>
<td>Woods in and around towns</td>
<td>NIHR</td>
<td>WIAT</td>
<td>EPH</td>
<td>2012-2016</td>
<td>£162,000</td>
<td>£33,000</td>
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<tr>
<td>Social and Emotional Education Development</td>
<td>NIHR</td>
<td>SEED</td>
<td>EPH</td>
<td>2012-2017</td>
<td>£275,000</td>
<td>£120,000</td>
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<tr>
<td>Shared decision making</td>
<td>NIHR</td>
<td>IPE</td>
<td>EEAECT</td>
<td>2011-2013</td>
<td>£87,000</td>
<td>£87,000</td>
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<tr>
<td>Cancer and Venous Access (CAVA) - a three way randomised controlled trial of long-term venous access devices for the delivery of chemotherapy</td>
<td>NIHR HTA</td>
<td>CAVA</td>
<td>IPE/EEACT</td>
<td>2013-2018</td>
<td>£1,000,000</td>
<td>£233,000</td>
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<tr>
<td>Costs and complications of diabetes</td>
<td>MRC Welcome Trust (SHIP)</td>
<td>SALHDa</td>
<td>2012-2015</td>
<td>£325,000</td>
<td>£313,000</td>
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<tr>
<td>SCALE (Scottish Alcoholic Liver Disease Evaluation of Epidemiology of costs)</td>
<td>CSO</td>
<td>SCALE</td>
<td>SALHDa</td>
<td>2012-2014</td>
<td>£152,000</td>
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<td>Statistical Support for NHS Scotland</td>
<td>NHS Health Scotland</td>
<td>SALHDa</td>
<td>2012-2014</td>
<td>£93,000</td>
<td>£87,000</td>
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<tr>
<td>The Economics of Parkinson’s.</td>
<td>Funder Parkinson’s’s</td>
<td>PD</td>
<td>EEAECT</td>
<td>2011-2014</td>
<td>£210,000</td>
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</tr>
</tbody>
</table>

## Research Programme Acronyms

<table>
<thead>
<tr>
<th>ACRONYM</th>
<th>PROGRAMME FULL NAME</th>
<th>Program Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAMSEL</td>
<td>Decision Analytic Modelling for Evaluation in Health</td>
<td>Dr Elisabeth Fenwick</td>
</tr>
<tr>
<td>EEACT</td>
<td>Economic Evaluation alongside Clinical Trials</td>
<td>Professor Andrew Briggs</td>
</tr>
<tr>
<td>EPH</td>
<td>Economics of Public Health</td>
<td>Dr Emma McIntosh</td>
</tr>
<tr>
<td>ES</td>
<td>Evidence Synthesis</td>
<td>Dr Olivia Wu</td>
</tr>
<tr>
<td>IPE</td>
<td>Incorporating Perspectives and Experiences</td>
<td>Dr Rebecca Shaw</td>
</tr>
<tr>
<td>SALHDa</td>
<td>Statistical Analysis of Linked Health Data</td>
<td>Dr James Lawrey</td>
</tr>
</tbody>
</table>

*Figures quoted are approximate at date of printing March 2013*
Teaching & Supervision
Teaching

Masters in Public Health

Kathleen Boyd Lectured on Health Economics modules: Economic Evaluation and Decision Making; Critical Appraisal; and Health Care Systems (2011/2012)

Elisabeth Fenwick Co-ordinated and taught on Health Economics (2011/2012) Teaches sessions on Health Economics Co-ordinates and teaches sessions on Economic Evaluation

Claudia Geue Lectures on Costs and Costing Tutorial Introduction to Statistical Methods

Eleanor Grieve Taught on Health Economics module on Decision-Makers

Jim Lewsey Co-ordinates (with Dr Danny Mackay) and teaches on Introduction to Statistical Methods course and teaches on Further Epidemiology and Statistics

Rebecca Shaw Co-ordinates and lectures on Qualitative Research Methods Lectures on Psychosocial approaches to Public Health

Olivia Wu Research Methods Module: Evidence synthesis: systematic review and meta-analysis Health Economics Module: Collecting Evidence

Elisabeth Fenwick Taught on Economic Evaluation as part of the Health Promotion course (2011/2012)

Lindsay Govan Delivered a lecture as part of the Core Research Methodology Seminar Series

MBChB

Elisabeth Fenwick Teaches a session on HTA on Research Methods course.

MSc in Primary Care

Claudia Geue Lectures on Funding Primary Care

MSc in Human Nutrition

Eleanor Grieve Taught on Health Economics of Obesity and Weight Management

Rebecca Shaw Lectures on Research Methods

BSc in Clinical Medicine

Jim Lewsey Co-ordinates (with Dr John McClure) and teaches on Medical Statistics course

Rebecca Shaw Co-ordinates and lectures on Health Promotion

MSc in Health Care

Elisabeth Fenwick Teaches a session on HTA on Management for Change in Health Care course

MSc in Global Mental Health

Eleanor Grieve Lectured on Research Methods

Sundry

Rebecca Shaw College of MVLS PG Training Programme – lectures on Qualitative Research College of Social Sciences Honours course – lectures on Sociology of Health and Illness

Kenny Lawson Teaching for Glasgow Caledonian University at both the Glasgow campus (November 2012) and London campus (December 2012) – Economic Evaluation of Public Health Interventions

Lindsay Govan Teaching Introduction to Stats course at European ISPOR assisting with tutorials in Stats Department

Supervision by HEHTA staff

Kathleen Boyd – supervised MPH student Nicole Soldner in 2011/12 ‘Examining the feasibility for an economic analysis of dyadic developmental psychotherapy for children with maltreatment associated disorders in the United Kingdom’.

Elisabeth Fenwick – supervised 2 MPH students, Geraldine Smith ‘The cost-effectiveness of screening for lung cancer using Early CDT-lung test for high risk individuals’ and Jim Duggan ‘Feasibility study of the effectiveness of a Telehealth Intervention compared to traditional methods for managing chronic diseases within a prison setting’

Lindsay Govan – supervised BSc Honours students in Stats Department; external supervisor for MSc student in Stats Department. Also supervising an MPH student.

Lindsay Govan and Olivia Wu – supervise one MPH student Athreya Devanur ‘Methods for estimating the cost of diabetes: a systematic review’

Eleanor Grieve – co-supervised with Mike Lean MSc Human Nutrition student Masoumeh Rezaie ‘Predicting alcoholic liver disease morbidity and mortality using behavioural and social risk factors from the Scottish health survey’ in 2011/2012

Emma McIntosh – supervises Richard Coventry who is researching ‘The economic costs of caries in 5 year olds in Scotland’

Rebecca Shaw – Supervised one MPH student Chun Yang (Veronica) in 2011/2012 ‘The effectiveness of a Telehealth Intervention compared to traditional methods for managing chronic diseases within a prison setting’

Rebecca Shaw – Teaching

Emma McIntosh – Teaching

Olivia Wu – Supervises one MPH student Forradee Nuchsongn ‘Cost effectiveness of Hepatitis B and Hepatitis C screening in non-OECD countries: a systematic review’
Building on the continued success of our Continuing Professional Development programme, HEHTA is very pleased to announce the launch of a new MSc in Health Technology Assessment.

Health Technology Assessment covers a broad range of activities relating to the appraisal of health service interventions. These activities include identifying, collating, synthesising, and sometimes even generating, a wide range of evidence and presenting this evidence in a coherent manner. Through a mixture of core and elective courses delivered by members of HEHTA, and a research project, undertaken in a specific area of interest with guidance from an internal or external supervisor, this MSc programme provides a strong vocational training in HTA.

It is our belief that the MSc HTA programme, which starts in September 2013, will enable students to develop the core competencies and skills required to make them 21st Century HTA practitioners and will “fill a learning gap… for those wishing to pursue a career in health technology assessment within the public or private sector”*.

For more details please see: www.glasgow.ac.uk/hehta;
to apply please see: www.glasgow.ac.uk/hta

* Comment from external assessor
+ Core courses include: Health Technology Assessment: Policy and Principles; Introduction to Statistical Methods and Introduction to Epidemiology.
^ Elective courses include: Decision Analytic Modelling for HTA; Health Economics; Economic Evaluation; Qualitative Research Methods; Further Epidemiology and Statistics; Evidence Synthesis; Economic Evaluation for Clinical Trials.

For more details: www.glasgow.ac.uk/hta
Continuing Professional Development short courses
Introduction to Stata
16th April 2012
Dr Lindsay Govan, Louise Craig

Course description and objectives: This course is designed for anyone who wishes to learn to use Stata. By the end of the course, participants should be able to use Stata to:

- Input data
- Add labels to a dataset to make it self-documenting
- Recode variables and derive new variables from existing ones
- Produce summary statistics, tables and graphs
- Find online help about a given topic or command
- Keep a record of their work and ensure it is reproducible

Originally offered as an optional short session at the start of our Systematic Review and Meta Analysis course, it was decided in 2011 to run the Introduction to Stata as a one day course. This has proved very popular with 17 of this year’s 23 SRMA participants also attending the Introduction to Stata.

Systematic Review & Meta Analysis of Direct, Indirect and Mixed Treatment Evidence
17th – 20th April 2012
Dr Olivia Wu

Course description and objectives: The course is designed for clinicians, health service researchers and other healthcare professionals who are involved in systematic reviews and meta-analyses as a piece of independent work or an integral part of a health technology assessment. By the end of the course, participants should be able to:

- Design and carry out systematic reviews
- Conduct appropriate meta-analyses using STATA
- Explain heterogeneity and bias
- Identify the important aspects of network meta-analysis

Our Systematic Review and Meta Analysis course has been running for 4 years, and is consistently well-attended, with 23 course participants in 2012.

Introduction to Parametric Survival Modelling
European Society for Medical Decision Making, Oslo, Norway
10th June 2012
Dr Jim Lewsey

Course description and objectives: This course will introduce the key components of parametric survival models with the aid of health economic examples. Specific objectives are:

- To review the Cox model leading onto the introduction of parametric modelling
- To demonstrate how to fit, interpret and choose between parametric survival models using data sets with health economic settings
- To demonstrate how parametric survival models can be used to predict transition probabilities beyond observed follow-up periods
- To illustrate how parametric survival models can be applied to the Kaplan-Meier sample-average estimator approach for estimating future costs and morbidity. This is the first year that this course has been offered, and following its successful delivery at the European SMDM in Oslo, it is intended to incorporate the content in our Economic Evaluation in Clinical Trials course.

‘This is, by far, one of the most well put together short courses I’ve attended at an SMDM meeting’

Advanced Modelling Methods for Health Economic Evaluation
12th – 14th September 2012
Professor Andrew Briggs, Dr Elisabeth Fenwick

Course description and objectives: The course is designed for participants who are familiar with basic decision modelling who wish to learn how to use more advanced modelling methods. It is envisaged that participants will currently be undertaking modelling for health economic evaluation within the pharmaceutical and medical device industries, consultancy, academia or the health service. By the end of the course, participants will be able to:

- Model and populate a Markov model with and without time-dependent probabilities.
- Make a model probabilistic to reflect parameter uncertainty and to run Monte Carlo simulation.
- Present the results of a probabilistic model using net monetary benefits and cost-effectiveness acceptability curves.
- Assess the expected value of perfect information

First run in 2007 this course has proved extremely popular, with numbers increasing year on year. In 2012 there were 76 participants, and the feedback has been consistently positive:

‘Excellent lectures and exercises’
‘I never learned so much in just three days’
‘Truly excellent course designed and delivered by experts who aim to simplify modelling methods’
‘A challenging, interesting and very enjoyable course’
‘...balances theory and practice very well.... comprehensive, challenging and at the same time exciting’
Economic Evaluation in Clinical Trials
17th – 19th September 2012
Professor Andrew Briggs, 
Associate Professor Henry Glick, Dr Elisabeth Fenwick

Course description and objectives: The course is designed for individuals undertaking health economic evaluations in academia, consultancies and industry, as well as those involved in the design and analysis of clinical trials (statisticians and health service researchers).

By the end of the course, participants will be able to:
• Design an economic evaluation in a clinical trial appropriate to a setting or intervention(s), including multinational Randomized Controlled Trials
• Analyse cost and effect data using univariate and multivariate approaches
• Estimate cost effectiveness (and net benefit) and the uncertainty surrounding the estimate
• Consider issues of transferability

The Economic Evaluation in Clinical Trials course first ran in 2009 and there has been a steady increase in attendance since then. There were 25 participants in this year’s course, and there is a high level of satisfaction as evidenced by comments on the evaluation forms:

‘I found this course excellent…provided me with the tools I need’
‘An excellent course for anyone interested in performing economic evaluations alongside clinical trials’
‘Very informative, mind-opening course’
‘A must-attend for any trial health economist’

Decision Analytic Modelling for HTA
31st August – 1st September 2012
Pre-ISPOR Course for Center for Drug Evaluation and Taiwan Society for Pharmacoeconomics and Outcomes Research, Taiwan
Professor Andrew Briggs, Dr Elisabeth Fenwick

Course description and objectives: This workshop provided an introduction to the application of decision analytical modelling for health technology assessment. Participants were expected to have some knowledge of economic evaluation, statistics and epidemiology, although modelling experience was not necessary.
Publications 2012


Watterson A, Little D, Young JA, Murray F, Doi L, Boyd KA, Azim E. Scoping a public health impact assessment of aquaculture with particular reference to tilapia in the UK. ISRN Public Health 2012 Article Id. 203796


Presentations


13. Briggs, A. The cost of hypoglycemia in diabetes: defining the severity of the hypoglycemic event is key to understanding the economic burden. 5-6-2012, 2nd - 6th June 2012 ISPOR 17th Annual International Meeting Washington Hilton, Washington, DC, USA Conference


16. Briggs, A. Communicating to decision makers the parameter uncertainty in the IQWIG efficiency frontier approach. 6-11-2012, 3rd - 7th November 2012 ISPOR 15th Annual European Congress Berlin, Germany Conference


18. Fenwick, E. How should governments deal with new expensive technologies? June 2012. Invited lecture presented at Departamento de Medicina Preventiva, University of Sao Paulo, Brazil.

19. Geue, C. Population ageing in Scotland: Implications for projection of healthcare expenditure. 9-6-2012, 9th - 12th June 2012 European Society for Medical Decision Making (ESMDM) Oslo, Norway Conference


23. Govan, L. Estimating the total costs of prescribed medicines attributable to people with diabetes in Scotland. 2012 Scottish Health Informatics Programme (SHIP) annual retreat Dunblane, Scotland Conference


26. Grieve, E. Literature review of the economic burden associated with severe and complicated obesity. 2012 19th European Congress on Obesity Lyon, France Conference

27. Grieve, E. Statistical analysis to establish the economic burden associated with severe and complicated obesity. 2012 19th European Congress on Obesity Lyon, France Conference
28. Kent, S. and McIntosh, E. Mapping algorithms for Parkinson’s Disease Questionnaire to the EuroQol EQ-5D: comparing OLS and multinomial regression logistic models. 10th - 13th June 2012 European Society for Medical Decision Making  Oslo, Norway  Conference


36. McIntosh, E. and Kent, S. The Economics of Parkinson’s: Broadening the scope of costs and benefits. 12th March 2012  Health Economics Research (HERU) Seminar Series Aberdeen University  Seminar

37. McIntosh, E. Methods for the economic evaluation of population health interventions: conceptual and practical challenges. 2012 PHSRN funded workshop  Wolfson Medical Building, University of Glasgow, Glasgow Workshop


41. Shaw, R., Toerien, M., Reuber, M., and Duncan, R. Shared decision making in the seizure clinic. 2011, 12th - 14th July 3rd International Conference on Conversation on Analysis and Clinical Encounters York Conference

42. Shaw, R. Consultations between a neurologist and patients with epilepsy/ non-epileptic seizures. 6-12-2011 Scottish Ethnomethodology, Interaction & Talk (Group) University of Edinburgh, 6th December 2011 Conference

43. Shaw, R. and Kitzinber, C. “You’re doing brilliantly” 2012, 20th - 22nd June 2012 Using Conversation Analysis in Feminist Research Sao Leopoldo, Brazil  Conference

44. Shaw, R., Toerien, M., Duncan, R., and Reuber, M. Offering patients choices: a pilot study of interactions in a neurology clinic 2012, 10th - 12th June 2012 14th Biennial Society for Medical Decision Making European Meeting  Oslo, Norway  Conference

45. Shaw, R. Exploring participant views and experiences. 2012, 13th - 17th August 2012 West End Walkers 65+ : design, results, participant experiences and physical activity patterns Glasgow Conference

46. Wu, O. ‘Decision-making in Health Technology Assessment’ – panel discussion with Jasmine Pwu and Neil Hawkins at ISPOR Asia, Taipei (September 2012)

47. Wu, O. ‘Cost-effectiveness analysis: born in the USA, spurned by Americans, adopted by Europeans’ – panel discussion with Uwe Siebert, Milton Weinstein and Ivar Kristiansen at European SMDM, Oslo (June 2012)


49. Wu, O. ‘Comparative effectiveness in decision-making’ – at the International HTA Workshops on Comparative Effectiveness, co-organised by the Taiwan Bureau of National Health Insurance and Novartis (Taipei, 2012)
Membership of Expert Bodies
Kathleen Boyd

Member of Health Economics Study Group (HESG)

Andrew Briggs

Editor, Health Economics
Associate Editor (outgoing) Medical Decision Making
Editorial Board, Value in Health

Elisabeth Fenwick

Member of NICE PDG on “Managing overweight and obesity among children and young people – lifestyle weight management services”
Trustee, Board for Society for Medical Decision Making
Co-Chair, Biennial SMDM-Europe Meeting 2012
Member of funding committee for Interdisciplinary Capacity Enhancements Awards, Health Research Board, Ireland
Associate Editor, Medical Decision Making
Member of Editorial Board for Pharmacoeconomics

Lindsay Govan

Graduate Statistician, Royal Statistical Society

Kenny Lawson

Member of Health Economics Study Group (HESG)
Member of International Health Economics Association (IHEA)

Jim Lewsey

Chartered Statistician, Royal Statistical Society
Chartered Scientist, The Science Council

Emma McIntosh

Editorial Board: The Patient Journal (current)

Editorial Board: BMC Medical Research Methodology (2011-2014)
Health Economists Study Group (HESG)
Data Monitoring and Ethics Committee: PACES Trial (2011-current)

Olivia Wu

Member of the National Institute for Health and Clinical Excellence’s (NICE) Technology Appraisal Committee
Member of the Scottish Chief Scientist Office’s Health Services and Population Health Research Committee
Advisor to the Scottish Intercollegiate Guidelines Network on issues relating to evidence review and health economics
Member of the Referee Panel for the Health and Medical Research Fund (HMRF) for the Hong Kong SAR Government (2012 onwards)
Member of the editorial board for Heart – health economic advisor