

CENTRE FOR HEALTH ECONOMICS RESEARCH AND EVALUATION

ANNUAL REPORT

2019



MESSAGE FROM THE DIRECTOR

I am very pleased to present the 2019 Annual Report for the Centre for Health Economics Research and Evaluation (CHERE). This report reflects the Centre's strong history and continued contributions to research that has impact on the health system. The Centre's contributions are through investigator initiated grants, funded by NHMRC and the ARC, but also through direct engagement with the health system on Committees, and through our contract research and engagement with policy makers. An outstanding aspect of CHERE's work is the growth in international profile, international collaborations and international funding of our work.

Our achievements in 2019 are a reflection of the incredible hard work of our staff who demonstrate their capacity to undertake outstanding research with a commitment to improving outcomes across the health system, be it in terms of the experience of health care consumers. the evaluation of new interventions, the measurement of performance in the health system or the design of funding arrangements. This activity reflects our research themes, which include health system performance, the economics of cancer care, quality of life, health technology assessment, health funding and financing, and end of life and aged care. Our approach to investigating these themes is supported by our methodological areas of strength across applied econometrics, economic evaluation and discrete choice experiments.

I want to thank our staff for the wonderful collaborative research culture that they foster throughout their work. Capacity building has always been a strength of the Centre, and all the research and professional staff in the Centre contribute to this, through their contributions to research projects, to research seminars, to our methods focussed meetings, which have been a new initiative this year, our PhD stage presentations and to our dissemination of research. I would particularly like to thank our professional support staff, Vanessa Nolasco, Lili Sanacore and Liz Chinchen who keep the Centre running

smoothly and ensure that the research staff are extremely well supported to undertake their research. I would also like to thank the Senior Management group of the Centre who provide me with enormous support – our two Deputy Directors Professors Stephen Goodall and Kees Van Gool, our Director of Strategy, Distinguished Professor Jane Hall, and particularly to Associate Professor Richard De Abreu Lourenco who has joined the Management Group and contributed to its strength and the direction this group provides for the Centre.

I would also like to offer my congratulations on some important and very notable achievements for staff in the past 12 months. Congratulations to Kees Van Gool, Jane Hall, Richard De Abreu Lourenco, Phil Haywood and Serena Yu, who together with colleagues were awardd a prestigious NHMRC Centre for Research Excellence grant. Jane Hall was our Founding Director, and has been an outstanding leader, not only within CHERE and the University, but also across health economics, health policy and health services research in Australia and internationally. Jane's mentorship and development of researchers across the field is unparalleled and I count myself as one of the many who are very grateful for her vision and support. Her contributions to the University have been recognised this year through the Distinguished Service Award, which will be awarded a degree ceremony in the next year. This is the highest honour the University can make to its staff and is based on the recommendation of University Council, for outstanding service. This well-deserved award reflects Jane's outstanding record of service to the University, the health system and the profession. Also extremely well deserved recognition is the very pleasing news that Kees Van Gool was promoted this year to Professor. This promotion reflects Kees' incredible hard work and leadership, in research, service and in his contributions to CHERE's teaching program. I was also very delighted that Professor Stephen Goodall, who has an outstanding record of PhD supervision and mentoring was recognised through his



as UTS's Supervisor of the Year in the UTS Research Excellence Awards - this award is extremely well deserved, and reflects the esteem we all, Stephen's colleagues and students, hold for his skills, mentorship and unfailing support in developing students. Elena Meshcheriakova, who is one of Stephen's PhD students had very well deserved success this year as the Business School winner and the overall University runner up in the 3 Minute Thesis Competition. This continues a great tradition for the Centre of success in this competition. Sopany Saing was awarded the Best Paper by an Early Career Researcher at the Health Services Research Association Australia and New Zealand 2019 Conference. These are some highlights of the many ways in which our staff have been recognised, as noted elsewhere in this Annual Report.

I am also delighted that Professor Marion Haas's leadership in health services research was recognised this year in the award of the Health Services Research Association of Australia and New Zealand's Distinguished Investigator Lifetime Achievement Award. This award reflects the enormous contribution that Marion has made to health services research throughout her career, and is truly deserved.

These individual awards and recognition are justly deserved, but also reflect the culture within CHERE, both in terms of achieving excellence, but also fostering collaboration and development of a strong and supportive research culture. It is a culture that I am proud to be part of and that will hold CHERE in good stead in the future.

Finally, I would like to thank the CHERE Advisory Board for their continued support, advice and advocacy for the work of the Centre.

CHERE ADVISORY BOARD

Prof Lloyd Sansom
Prof Denzil Fiebig
Ms Lisa Gropp

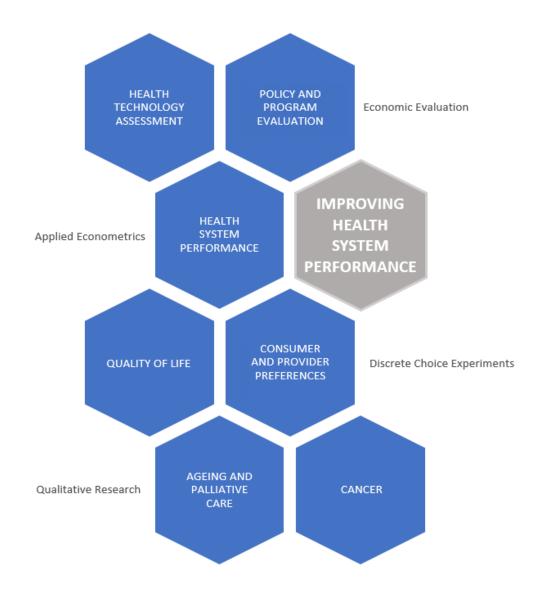
Mr Bill Montgomery

Prof Ashish Sinha / Prof Michelle Baddley (UTS)

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OUR RESEARCH



OUR RESEARCH

75

Peer reviewed journal articles

29

Years of
Excellence in
Health Economics

Peer reviewed grants cat 1 9
Peer reviewed grants cat 2 1
Peer reviewed grants cat 3 2
Commissioned research 9

78

National and International conference presentations

SELECTED FUNDING HIGHLIGHTS: New Grants in 2019

NHMRC Centre for Research Excellence (CRE) on Value-Based Payments in Cancer Care

CHERE Investigators: Jane Hall, Kees van Gool, Philip Haywood, Richard De Abreu Lourenco, Serena Yu

In collaboration with: Cancer Council Australia, Cancer Council NSW, Cancer Institute NSW, UNSW, USyd

 NHMRC Centre for Research Excellence (CRE): SPHERE – Sexual and Reproductive Health for Women: Achieving Better Outcomes through Primary Care

CHERE Investigators: Marion Haas, Jody Church

In collaboration with: Monash University, La Trobe University, The University of Sydney

 NHMRC Medical Research Future Fund (MRFF): Frailty-stratified randomised controlled bayesian adaptive trial - the FRAIL-M study

CHERE Investigators: Richard De Abreu Lourenco

In collaboration with: Alfred Health, Monash University, St Vincent's Hospital Melbourne,

Princess Alexandra Hospital, University of Queensland

 Combining health and social outcomes using the EQ-5D-5L and the ASCOT – development of a pilot value set

CHERE Investigators: Rosalie Viney, Brendan Mulhern, Deborah Street

In collaboration with: Curtin University, Deakin University, Simon Fraser University

RESEARCH THEMES



FEATURED POJECTS

Health System Performance

The evaluation of the performance of the health system involves examining the efficiency, equity, quality and sustainability of healthcare delivery, as well as the funding and financing arrangements underpinning the health system. Using national and international datasets to advance the measurement and benchmarking of these outcomes, the CHERE team works with organisations including national and state-based agencies, the OECD, WHO and the Commonwealth Fund to produce comparable health system performance research.

Project:
Centre for Research
Excellence on
Value-Based
Payments in Cancer

Health Technology Assessment

External Evaluation of Pharmaceutical Benefits Advisory Committee (PBAC)

Project:

The health technology team at CHERE undertakes economic evaluations of health interventions and technologies, including safety, effectiveness, economic impacts and ethical issues associated with the introduction of health technologies. We have considerable experience in advanced economic evaluation methods and applying these to evaluate medical services, pharmaceutical products and public health interventions. Our work includes the development of economic models and evaluation of new technologies for the Medical Services Advisory Committee and the Pharmaceutical Benefits Advisory Committee. The results play a significant role in informing decision-

making in the healthcare sector by ensuring that policy-makers have the necessary information to understand the comparative harms, benefits and costs of new technologies.

Policy and Program Evaluation

CHERE's research in this area focuses on the robust evaluation of public policy interventions. Using applied econometric and quasi-experimental methods, the research uses a range of data sources including administrative survey data and data linkage methods to estimate the impacts of policy interventions on a range of economic, social and health outcomes. Recent projects have included evaluations of Medicare reforms, Healthy Homes, models of maternity care, and delivery of integrated care in rural settings.

Project: Victorian Healthy Homes Program

Consumer and Provider Preferences

Project:

Community preferences for care at the end of life Our research in this area is focused on eliciting consumer and provider preferences and identifying their impacts on the behaviour of various actors in the healthcare system. The aim is to inform the design of a consumer-friendly health system that offers relevant information and services and facilitates improved choice. We utilise several survey methods to measure preferences, including direct ratings of characteristics of care and stated preference elicitation using discrete choice experiments (DCE). By identifying important factors that contribute to the design of better health care services, the results of this research can be

used to inform current policy or to investigate the consequences of hypothetical changes to policy or practice. Recent projects include investigating consumer preferences for health care performance information and identifying factors affecting GP charges and Medicare bulk-billing.

Quality of Life

CHERE's quality of life research focuses on both the measurement and valuation of health and quality of life for use in the economic evaluation of health technologies. Our measurement focused research uses psychometric methods to develop new measures of quality of life and to examine existing instruments. Our valuation focused research includes the methodological development and application of preference elicitation methods such as discrete choice experiments (DCE) and time trade off to develop value sets for use in economic evaluation. Recent projects include the development of an EQ-5D-5L value set for Australia, a comparison of DCE and time trade off methods for eliciting values, the development of a new version of the SF-6D, and a large scale comparison of DCE design approaches.

Project:

Development and
psychometric
testing of EQ-5D-5L
bolt-on descriptors
for vision and
cognition

Ageing and Palliative Care

Ageing and Palliative Care research at CHERE aims to contribute evidence-based economic research and inform policy development in the increasingly important topic of ageing in Australia. We utilize a range of economic analytical tools to evaluate the healthcare and social needs of the aged and those who could benefit from palliative care (including end of life care). Using administrative

Services for Impact Analysis of Allocating Residential Aged Care Places

Project:

and operational data sets and data linkages, our analyses inform changes to the financial, organisational and workforce arrangements that aim to improve the delivery of aged and palliative care services. We have a strong policy focus and a proven track record of engagement with governments, consumer groups, providers and financers of these services as well as disseminating our results in academic journals and the broader media.

Economics of Cancer

Our cancer research focuses on using economic analysis to improve the delivery and outcomes of cancer care. It draws on the Centre's key methodological strengths including the use of discrete choice experiments to understand the factors that influence patients and providers to participate in care, developing different approaches to the measurement and valuation of quality of life in cancer patients, understanding provider incentives in care, and the use of existing administrative data sets to explore utilization and costs of cancer care. In addition, the principles of

economic evaluation underpin a major component of the work in cancer at CHERE: the Cancer Australia Cancer Research Economic Support Team (CREST). CREST provides high quality expert advice and support to the 14 Cancer Australia Multi-site Collaborative Cancer Clinical Trials Groups (CTGs) on the use of health economics approaches, particularly economic evaluation, to evaluate the costs and outcomes of interventions being tested in cancer clinical trials. While a core focus of CREST is on the provision of advice, the ultimate aim of the work is to build capacity within the cancer research community for the conduct of health economic research alongside clinical trials.

Project:

Health and pharmacoeconomic national technical services for the support for cancer clinical trials program (CREST)

ACHIEVEMENTS



Jane Hall was elected as President of the Academy of Social Sciences



Sopany Saing won *Best Paper* Award for Early Career Researcher at HSRAANZ in Auckland



Marion Haas was honoured with the *HSRAANZ's Distinguished Investigator Award* in recognition of her lifetime achievement and contribution in health services research.

Stephen Goodall was awarded the *UTS* Supervisor of the Year Award for his skills, mentorship and unfailing support in developing **students**.



Kees Van Gool was promoted to Professor.

Stephen Goodall and collaborators were selected for the highly prestigious international *JAMDA Morley Award* for the paper on *'Progressive Resistance and Balance Training for Falls Prevention in Long-Term Residential Aged Care: A Cluster Randomized Trial of the Sunbeam Program'* published in the Journal of Post-Acute Care and Long Term Medicine, having recognised the paper to be the most impactful in terms of relevance for practice and policy in post-acute and long-term care.

Serena Yu was selected to present at an *Early Career Special Organised Session* at the International Health Economics Congress (IHEA).

Rebecca Addo's thesis was featured in the Academic Health Economist's Blog for PhD Thesis of the Month.

Paula Cronin's PhD thesis was used in Speech Pathology Australia's clinical guidelines for *Speech Pathology in Justice*.

Sopany Saing won *People's Choice* in the UTS Business School 3 Minute Thesis (3MT) Competition.

Elena Meshcheriakova won *First Place* in the UTS Business School round of the *3MT*. Elena represented the faculty in the *UTS 3 Minute Thesis Competition*, finishing as runner-up.



List of CHERE publications: https://web-tools.uts.edu.au/publications/search.cfm?UnitId=480

PHD STUDENTS



Constanza Vargas at the ISPOR-AC Budget Impact Modelling workshop



PhD Graduation ceremony with Dr Rebecca Addo and Dr Jody Church with supervisors Prof Marion Haas and Prof Stephen Goodall



PhD Graduation ceremony with Dr Sheena Arora and Dr Paula Cronin with supervisor Prof Rosalie Viney



3MT competition winner (Business)
and runner up (UTS)
Elena Meshcheriakova
https://www.youtube.com/watch?v=hypBX
LNtvMY

Current HDR students

9

Graduations in 2019

5

Current PhD Topics:

- Surrogate outcomes for the decision-making process in Prostate Cancer: an economic evaluation – Rafael De Feria Cardet
- The impact of the chronic disease dental scheme – Siobhan Dickinson
- Economic evaluation and the use of discrete choice experiments in the analysis and prediction of behaviour in the health care market – Elena Meshcheriakova
- Testing and advancing the methods used to develop and value preference-based measures for use in economic evaluation – Brendan Mulhern

- The cost effectiveness of advanced heart failure management and mechanical circulatory assist therapy – Ros Pritchard
- Modelling the costeffectiveness of strategies to treat end-stage heart failure using discrete event simulation – Sopany Saing
- Health economics of anxiety and depression in cancer patients – Jackie Yim
- Quality of life and understanding consumer/patient preferences – Alice Yu
- Economic evaluation of foodborne illness -Kathleen Manipis

TEACHING

UNDERGRADUATE

Health Economics and Evaluation

(Biomedical Engineering, Autumn session)

POSTGRADUATE

Introductory Health Economics
 Health Technology Assessment
 Molecule to Market
 Health Innovation Studio
 (Business, Autumn session)
 (Business, Spring session)
 (Health, Spring session)
 (Engineering, Spring session)

MASTERS OF HEALTH POLICY AND ECONOMICS

CREST WORKSHOPS:

- o Understanding health economics in cancer research
- o Preferences in Cancer Trials What Choices can tell us About Value
- o Health Economics in Cancer Research

EXTERNAL ENGAGEMENTS

ISPOR Global and *ISPOR Australia Chapter* is made up of industry and academic networks that provide members with education on health practices and methodologies.

The Cancer Research Economics Support Team (CREST) is part of the Cancer Australia Support for Clinical Trials program and plays an important part in ensuring that the Cancer Clinical Trials groups produce high-quality economic evidence to be incorporated into future decision-making. The role of the CREST team includes, health economics advice and support during protocol development and capacity building through workshops, seminars, briefing papers and structured training opportunities.

OUR PEOPLE

RESEARCH LEADERS

Director Strategy

Rosalie Viney Stephen Goodall Kees Van Gool
Director Deputy Director Deputy Director

Jane Hall Richard De Abreu Lourenço Marion Haas

Michael Woods Deborah Street Tracey-Lea Laba

SENIOR RESEARCH FELLOWS

Phil HaywoodBrendan MulhernConstanza VargasPatsy KennyMaryam Naghsh NejadSarah WiseIrina KinchinKatie PageSerena Yu

RESEARCH FELLOWS

Olukorede Abiona Paula Cronin Elena Meshcheriakova
Rebecca Addo Lutfun Hossain Chunzhou Mu
Sheena Arora Nancy Kim Sopany Saing
Margie Campbell Milena Lewandowska Kittiphong Thiboonboon
Jody Church Kathleen Manipis Michael Wright

RESEARCH SUPPORT

Elizabeth Chinchen Liliana Sanacore
Research Manager Executive Assistant

Vanessa Nolasco Jessica Tse

Centre Manager Research Assistant

WORKING WITH US

https://www.uts.edu.au/research-and-teaching/our-research/health-economics-research-and-evaluation



