MONASH University

MONASH BUSINESS SCHOOL

# CENTRE FOR HEALTH ECONOMICS

## Guide to Health areas and Research themes for Visiting Scholars Program 2020

MONASH University

MONASH BUSINESS SCHOOL

# CENTRE FOR HEALTH ECONOMICS

## Contents:

## Health areas



## Research themes

## Child Health and Development

Investments in early childhood development are important for the development of an individual over the life course. For example, skill development in early childhood and health in childhood determine, among other things, health in adulthood, educational outcomes, labour market participation, and income. Understanding the mechanisms underlying the generation of good health in childhood and the factors that influence child development are therefore very important. Using both theoretical and econometric models applied to both primary and secondary data, the CHE is working to not only further examine and identify the various potential factors that influence child development and its impact on both socio-economic outcomes in adulthood, but also to understand the mechanisms that generate and underlie such relationships.

**Some of our recent research explores:**

- The socio-economic determinants and impact of childhood obesity.
- Cognitive development and child health.
- The relationship between health and personality traits.
- Impact of parental characteristics on child health and child development.
- Health and wellbeing of children living in informal "slum" settlements in Indonesia and Fiji.

**Some of our recent publications:**


- **Johnston, D. W.**, Propper, C., Pudney, S., & **Shields, M. A.** (2014). Child mental health and educational attainment: Multiple observers and the measurement error problem. *Journal of Applied Econometrics*, *29*, 880-900.
- **Black, N.**, **Johnston D. W.**, & Peeters, A. (2015). Childhood obesity and cognitive achievement. *Health Economics*, *24*, 1082-1100.
- Cobb-Clark, D. A., **Kassenboehmer, S. C.**, Le, T., McVicar, D., & Zang, R. (2015). 'High'-school: The relationship between early marijuana use and educational outcomes. *Economic Record*, *91*, 247-266.
- **Woode, M. E.** (2017). Parental health shocks and schooling: The impact of mutual health insurance in Rwanda. *Social Science & Medicine*, *173*, 35-47.
- **Black, N.**, & **Kassenboehmer, S. C.** (2017). Getting weighed down: The effect of childhood obesity on the development of socioemotional skills. *Journal of Human Capital*, *11*, 263-295.
- Elkins, R., **Kassenboehmer, S. C.**, & Schurer, S. (2017). The stability of personality traits in adolescence and young adulthood. *Journal of Economic Psychology*, *60*, 37-52.
- Abu-Zaineh, M., & **Woode, M. E.** (2018). Investigating the dimensions of youth wellbeing: An exploratory structural equation modelling approach applied to Palestine. *Child Indicators Research*, *11*, 57-78.
- Bourlès, R., Ventelou, B., & **Woode, M. E.** (2018). Child income appropriations as a disease coping mechanism: consequences for the health-education relationship. *The Journal of Development Studies*, *54*, 57-71.
- **Black, N.**, **Kung, C. S. J.**, & Peeters, A. (2018). For richer, for poorer: The relationship between adolescent obesity and future household economic prosperity. *Preventive Medicine*, *111*, 142-150.

## Health areas

- **Sweeney, R.**, Moodie, M., Nguyen, P., Fraser, P., Bolton, A., et al. (2018). Protocol for an economic evaluation of WHO STOPS childhood obesity stepped-wedge cluster randomised controlled trial. *BMJ Open*, *8*, e020551.

**Some of our major projects:**

- Australian Research Council (ARC) (2018-2022) "*Children's time investments, cognitive development and health*" Black, N.
- Wellcome Trust Research Partnership (2017-2022) "*Revitalising Informal Settlements and their Environments (RISE)*" Johnston, D.

**Our lead researchers**:

Socioeconomic determinants, cognitive development, child health:
Nicole Black, David Johnston, Sonja Kassenboehmer, Maame Esi Woode

Health and wellbeing of children living in informal settlements:
David Johnston, Rohan Sweeney

Health and personality traits:
Sonja Kassenboehmer

## Mental Health and Wellbeing

Poor mental health imposes immense costs on individuals, families, neighbourhoods, workplaces, and health care and welfare systems. Recent estimates place this cost for Australia at up to $60 billion annually, with one-in-five adults suffering from a mental health condition.

Substantial links are seen between poor mental health and economic status, including lower educational attainment, unemployment, poverty, homelessness and crime. Poor mental health also impacts national productivity, considering its links with higher worker absenteeism and presenteeism.

Economics provides an extensive set of analytical tools for discovering new facts and insights that can aid the prevention, diagnosis, treatment, and management of mental health conditions. Using large and complex survey data and applying advanced methods to address issues of causation, we aim to provide evidence on the economic causes and consequences of poor mental health, the costs of poor mental health on productivity, and the evaluation of policy interventions aimed at improving population mental health and economic participation.

**Some of our recent publications:**


- **Kung, C. S. J.**, **Johnston, D. W.**, & **Shields, M. A.** (2018). Mental health and the response to financial incentives: Evidence from a survey incentives experiment. *Journal of Health Economics*, *62*, 84-94.
- Milner, A., Aitken, Z., Kavanagh, A., LaMontagne, A. D., & **Petrie, D.** (2017). Status inconsistency and mental health: A random effects and instrumental variables analysis using 14 annual waves of cohort data. *Social Science & Medicine*, *189*, 129-137.
- Milner, A., **Petrie, D.**, LaMontagne, A. D., & Butterworth, P., (2019). Do psychosocial job stressors influence mental health service use? Evidence from an Australian cohort. *Occupational & Environmental Medicine*, *76*, 295-301.
- Milner, A., Aitken, Z., LaMontagne, A. D., King, T., **Petrie, D.**, & Kavanagh, A. (2017). Underemployment and its impacts on mental health among those with disabilities: Evidence from the HILDA cohort. *Journal of Epidemiology & Community Health*, *71*, 1198-1202.
- Tseng, F.-M., **Petrie, D.**, & Leon-Gonzalez, R. (2017). The impact of spousal bereavement on subjective wellbeing: Evidence from the Taiwanese elderly population. *Economics & Human Biology*, *26*, 1-12.
- **Mortimer, D.**, Trevena-Peters, J., McKay, A., & Ponsford, J. (2019). Economic evaluation of activities of daily living retraining during posttraumatic amnesia for inpatient rehabilitation following severe traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, *100*, 648-655.
- **Johnston, D. W.**, **Shields, M. A.**, & Suziedelyte, A. (2018). Victimisation, wellbeing and compensation: Using panel data to estimate the costs of violent crime. *The Economic Journal*, *128*, 1545-1569.
- Engel, L., **Chen, G.**, **Richardson, J.**, & Mihalopoulos, C. (2018). The impact of depression on health-related quality of life and wellbeing: Identifying important dimensions and assessing their inclusion in multi-attribute utility instruments. *Quality of Life Research*, *27*, 2873–2884.
- Baker, A., Borland, R., Bonevski, B., Segan, C. J., Turner, A., …, **Sweeney, R.**, et al. (2019). "Quitlink"—A randomized controlled trial of peer worker facilitated Quitline support for smokers receiving mental health services: Study protocol. *Frontiers in Psychiatry*, *10*, 124.

## Health areas

**Some of our major projects:**

- NHMRC Project Grant (2018-2022) "*Randomised trial into Quitlink for smoking cessation amongst people with severe mental illness*" (A$1,141,189) Sweeney, R.
- Victorian Responsible Gambling Foundation (2018-2020) "*The impacts of increased gambling opportunities on gambling behaviour and related harms among older Victorians*" Johnston, D., & Black, N.
- Australian Research Council (ARC) Discovery Project (2018-2020) "*Econometric studies of the dynamics of loneliness and social isolation*" (A$399,740) Shields, M.
- ARC (2014-2018) "*New perspectives on the socioeconomic determinants and dynamics of mental health and wellbeing using panel, cohort and internet search data*" (A$840,394) Shields, M.
- ARC (2013-2017) "*The socioeconomic determinants and dynamics of mental health and disorders in Australia and the UK: Evidence from childhood to the elderly years*" (A$439,000) Johnston, D., & Shields, M.
- National Health and Medical Research Council Project (NHMRC) Partnership Grant, with BeyondBlue and Departments and Agencies of WA, ACT and SA Governments (2019-2023) "*IMPRovE: Implementing work-related Mental health guidelines in general PRacticE*" (A$872,196 NHMRC contribution) Mortimer, D.
- Transport Accident Commission (TAC) Project Grant (2019-2021) "*Early vocational intervention for people who have experienced trauma*" (A$1,757,236) Mortimer, D.
- NHMRC Project Grant (2016-2019) "Determining the Best Outcome Measures for Assessing Cost-Effectiveness of Interventions for Childhood Mental Disorders" (A$483,837) Richardson, J & Chen, G.

**Our lead researchers**:

Gang Chen, David Johnston, Sonja Kassenboehmer, Claryn Kung, Maarten Lindeboom, Duncan Mortimer, Dennis Petrie, Michael Shields

## Cognition

Cognitive skills - such as executive function, memory, reasoning - play a major role in shaping labour market, health and social outcomes. It is therefore important to foster cognitive skills and prevent cognitive impairment. Cognition can be affected by many mental disorders, such as anxiety, depression or addiction.

Cognitive disorders such as dementia have an enormous impact on society and our health care system. As individuals live longer, dementia rates increase. Dementia is the second leading cause of death and the main cause of disability in older Australians.

Some of the ongoing work of CHE deals with: understanding the impacts of cognitive impairments on affected individuals and their families; identifying the protective factors of cognitive decline; evaluation of policy reforms, health interventions and vocational interventions related to neurocognitive disorders.

In our analysis we employ a range of causal identification strategies; we use randomized control trials, but also big administrative and survey data that track people over time.

**Some of our recent research explores:**

- Work tasks as protective factors to dementia.
- Mental disorders, cognitive impairment, and financial decision-making.
- Cost-effectiveness analysis of health and vocational interventions for traumatic brain injury.
- Retirement and cognitive decline.
- Early life experiences, adverse events, and cognitive decline.

**Some of our recent publications:**


- Cobb-Clark, D. A., **Kassenboehmer, S. C.**, & Sinning, M. (2016). Locus of control and savings. *Journal of Banking and Finance*, *73*, 113-130.
- Coe, N. B., von Gaudecker, H. M., **Lindeboom, M.**, & Maurer, J. (2012). The effect of retirement on cognitive functioning. *Health Economics*, *21*, 913-927.
- **Johnston, D. W.**, **Kassenboehmer, S. C.**, & **Shields, M. A.** (2016). Financial decision-making in the household: Exploring the importance of survey respondent, health, cognitive ability and personality. *Journal of Economic Behavior and Organization*, *132*, 42-61.
- **Johnston, D.**, Nicholls, M. E. R., Shah, M., & **Shields, M. A.** (2013). Handedness, health and cognitive development: Evidence from children in the National Longitudinal Survey of Youth. *Journal of the Royal Statistical Society Series A (Statistics in Society)*, *176*, 841-860.
- **Kassenboehmer, S. C.**, & Schurer, S. (2018). Survey item-response behavior as an imperfect proxy for unobserved ability: Theory and application. *IZA Discussion Papers*, 11449.
- **Mortimer, D.**, Bosch, M., McKenzie, J., Turner, S., Chau, M., et al. (2018). Economic evaluation of the NET intervention versus guideline dissemination for management of mild head injury in hospital emergency departments. *Implementation Science*, *13*, 147.
- **Mortimer, D.**, Trevena-Peters, J., McKay, A., & Ponsford, J. (2018). Economic evaluation of activities of daily living retraining during posttraumatic amnesia for inpatient rehabilitation following severe traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, forthcoming.

## Health areas

- van den Berg, G. J., Deeg, D. J. H., **Lindeboom, M.**, & Portrait, F. (2010). The role of early-life conditions in the cognitive decline due to adverse events later in life. *The Economic Journal*, 120, F411-F428.

**Some of our major projects:**

- Commonwealth Scientific and Industrial Research Organisation (CSIRO) Research Fellowship (2014-2017) "*Cognitive decline and financial decision-making*" Johnston, D., Kassenboehmer, S., & Shields, M.
- Transport Accident Commission (TAC) Project Grant (2018-2021) "*Early vocational intervention for people who have experienced traumatic injury*" Mortimer, D and colleagues.

**Our lead researchers:**

The link between mental health, cognitive impairment and economic decision-making:
Sonja Kassenboehmer, Michael Shields

Causes and consequences of cognitive decline and cognitive disorders:
David Johnston, Sonja Kassenboehmer, Maarten Lindeboom, Michael Shields

Cost-effectiveness analysis of health and vocational interventions for neurocognitive disorders:
Duncan Mortimer

## Risky Behaviours

Risky behaviours are a major cause of preventable death. They include smoking, illicit and injecting drug use, excessive consumption of alcohol and prescription drugs, gambling, unsafe sex, dangerous driving practices and also poor diet and physical inactivity (see Obesity and Physical Inactivity health topic). In addition to premature death, such risky behaviours cause significant ill health, placing an enormous burden on health systems and place significant negative externalities on families, friends and broader communities.

In order to inform better policies to reduce harms associated with these types of risky behaviours, we seek to provide a better understanding of the drivers of risky behaviours and their trajectory over the lifecycle. In addition, we employ econometric and economic evaluation methods to evaluate the impacts of policies and interventions on risky behaviours and their subsequent harms.

**Some of our recent research explores:**

- Economic evaluations of smoking cessation interventions amongst disadvantaged and vulnerable populations.
- Economic evaluation of alcohol interventions and impact assessments of policies to regulate alcohol price and availability.
- Effect of maternal smoking on the health of infants
- Overuse of prescription opioid painkillers and tranquilizers in Australia.
- The impact of parental drug use and methadone treatment on child development.
- Effect of incentives and feedback for reducing risky driving behaviours.
- Eliminating hepatitis C transmission.
- The impact of electronic gaming machine venues on gambling and related harms.

**Some of our recent publications:**


- **Mortimer, D.**, Wijnands, J., **Harris, A.**, Tapp, A., & Stevenson, M. (2018). The effect of 'smart' financial incentives on driving behaviour of novice drivers. *Accident Analysis & Prevention*, *119*, 68-79.
- Stevenson, M., **Harris, A.**, **Mortimer, D.**, Wijnands, J. S., Tapp, A., et al. (2018). The effects of feedback and incentive-based insurance on driving behaviours: Study approach and protocols. *Injury Prevention*, *24*, 89-93.
- Crombie, I. K., Irvine, L., Williams, B., Sniehotta, F. F., **Petrie, D.**, et al. (2018). Texting to Reduce Alcohol Misuse (TRAM): Main findings from a randomized controlled trial of a text message intervention to reduce binge drinking among disadvantaged men. *Addiction*, *113*.
- Crombie, I. K., Irvine, L., Williams, B., Sniehotta, F. F., **Petrie, D.**, et al. (2018). Text message intervention to reduce frequency of binge drinking among disadvantaged men: The TRAM RCT. *Public Health Research*, 6.
- Huang, L., **Khalil, U**., & Yıldız, N. (2019). Identification and estimation of a triangular model with multiple endogenous variables and insufficiently many instrumental variables. Journal of Econometrics, 208(2), 346-366.

## Health areas

**Some of our major projects:**

**Smoking cessation**

- National Health and Medical Research Council Project (NHMRC) Grant (2017-2021) "*Adding an electronic-cigarette to standard behavioural treatment for low-socioeconomic status smokers: A randomised trial*" (A$1,381,127) Petrie, D.
- NHMRC Project Grant (2016-2020) "*A non-inferiority trial of cytisine versus varenicline for smoking cessation*" (A$1,885,000) Petrie, D.
- NHMRC Project Grant (2018-2022) "*Randomised trial into Quitlink for smoking cessation amongst people with severe mental illness*" (A$1,141,189) Sweeney, R.
- Department of Health—Tackling Indigenous Smoking Innovation Grants (2016-2019) "*A randomised controlled study of health intervention "SNAP" in Northern Territory prisons*" (A$870,000) Petrie, D.

**Alcohol use**

- National Institute for Health Research (NIHR) Public Health Research UK (2013-2017) "*Reducing binge drinking among disadvantaged men through a brief intervention delivered by mobile phone: A multi-centre study*" (£845,521) Petrie, D.

**Drug use**

- New South Wales (NSW) Ministry of Health (2014-2015) "*Improving GP prescribing of pharmaceutical opioids*" (A$62,580) Petrie, D.
- Economic and Social Research Council (ESRC) / Medical Research Council (MRC) UK (2010-2014) "*Linking routine health and social datasets to analyse the impact of parental drug use and methadone treatment on child development*" (£69,136) Petrie, D.

**Gambling behaviour**

- Victorian Responsible Gambling Foundation (2018-2020) "*The impacts of increased gambling opportunities on gambling behaviour and related harms among older Victorians*" Johnston, D., & Black, N.

**Others**

- NHMRC Partnership Grant (2016-2020) "*Eliminating hepatitis C transmission by enhancing hepatitis C care and treatment in primary health care settings*" (A$1,222,000) Petrie, D.
- Australian Research Council (ARC) Linkage Project, with the Victorian Transport Accident Commission (TAC) and Institute for Safety Compensation and Recovery Research (ISCRR) (2015-2019) "*Effects of feedback and incentive-based insurance on driving behaviours*" (A$530,000 ARC contribution) Mortimer, D., & Harris, A.

**Our lead researchers**:

Smoking and alcohol:
Duncan Mortimer, Dennis Petrie, Rohan Sweeney, Umair Khalil

Illicit and prescription drug misuse:
Sonja Kassenboehmer, Dennis Petrie

Gambling:
Nicole Black, David Johnston

## Health areas

Risky driving:
Anthony Harris, Duncan Mortimer

Crime:
Umair Khalil

## Obesity and Physical Inactivity

Overweight and obesity rates are at unprecedented levels. Economics plays a key role in the decisions around healthy eating and physical activity. This research theme uses econometric methods and longitudinal survey data to explore some of the social and economic causes of obesity and physical inactivity. For example, can an increase in income reduce obesity? Can school sports facilities have long lasting health and socioeconomic benefits in late adulthood?

It also examines the economic consequences of obesity, particularly among children. Childhood obesity is especially concerning because of the diminished control that children have over the decisions that lead to obesity, and because the personal consequences can be life-long. Systems-based interventions have potential to be more effective in preventing childhood obesity than common existing strategies. We are leading developments of methods for the complex task of economic evaluation of such systems-based interventions.

**Some of our recent publications:**

- Farrell, L., Hollingsworth, B. P., Propper, C., & **Shields, M. A.** (2014). The socioeconomic gradient in physical inactivity: Evidence from one million adults in England. *Social Science & Medicine*, *123*, 55-63.
- Janke, K., Propper, C., & **Shields, M. A.** (2016). Assaults, murders and walkers: The impact of violent crime on physical activity. *Journal of Health Economics*, *47*, 34-49.
- **Black, N.**, **Johnston, D. W.**, Propper, C., & **Shields, M. A.** (2019). The effect of school sports facilities on physical activity, health and socioeconomic status in adulthood. *Social Science & Medicine*, *220*, 120-128.
- **Au, N.**, & **Johnston, D. W.** (2015). Too much of a good thing? Exploring the impact of wealth on weight. *Health Economics*, *24*, 1403-1421.
- **Black, N.**, **Johnston, D.**, & Peeters, A. (2015). Childhood obesity and cognitive achievement. *Health Economics*, *24*, 1082-1100.
- **Black, N.**, & **Kassenboehmer, S. C.** (2017). Getting weighed down: The effect of childhood obesity on the development of socioemotional skills. *Journal of Human Capital*, *11*, 263-295.
- **Black, N.**, Hughes, R., & **Jones, A. M.** (2018). The health care costs of childhood obesity in Australia: An instrumental variables approach. *Economics & Human Biology*, *31*, 1-13.
- **Johnston, D. W.**, & Lordan, G. (2014). Weight perceptions, weight control and income: an analysis using British data. *Economics & Human Biology*, *12*, 132-139.
- **Sweeney, R.**, Moodie, M., Nguyen, P., Fraser, P., Bolton, K., et al. (2018). Protocol for an economic evaluation of WHO STOPS childhood obesity stepped-wedge cluster randomised controlled trial. *BMJ Open*, *8*, e020551.
- Sonntag, D., **Sweeney, R.**, Litaker, D., & Moodie, M. (2018). Economic evaluations of system-based obesity interventions - the case for a new approach. *Obesity Reviews*, *19*, 885-887.

**Some of our major projects:**

- Australian National Preventive Health Agency Fellowship (2013-2018) "*How costly is childhood obesity? An economic analysis of the consequences of obesity in Australian children*" Black, N.

## Health areas

**Our lead researchers**:

Obesity:
Nicole Black, David Johnston

Physical inactivity:
Nicole Black, David Johnston, Michael Shields

Economic evaluation of obesity interventions:
Rohan Sweeney

## Economics of Disability

People with disabilities face barriers in realising their potential to participate and contribute to society, and in achieving a level of control over their own lives.

Australia has recently undergone major reforms around the way disability support services are organized and funded. There are numerous economic questions around how to design and implement an efficient and equitable allocation of funds to support people with disabilities. Some of our ongoing work at the CHE deals with: evaluation of policy reforms around labour market opportunities and support of disability support pension recipients including cost-effectiveness analysis; mental health of people with disabilities, measurement of improvement in quality of life related to support and services; the provision of formal and informal support; disabilities in children and its family impacts; and discrimination of people with disabilities.

We employ a range of causal empirical identification strategies, including randomized control trials. We gather and link big administrative and survey data and employ econometric methods to identify causal effects. We also conduct discrete choice experiments to elicit preferences for disability support services to inform decisions on the optimal provision and financing of disability support services.

**Some of our recent research explores:**

- Causal employment effects of compulsory job counselling for disability pensioners.
- Underemployment and its impacts on mental health among those with disabilities.
- Discrimination against people with disabilities.
- Labour market effects of having a child diagnosed with autism.
- Individualised preferences for a disability-specific outcome measure.

**Some of our recent publications:**

- Broadway, B., Chigavazira, A., & **Kassenboehmer, S. C.** (2014). Labour force potential of disability support pension recipients. Prepared for the *Department of Employment, Australian Government.*
- **Chen, G.**, **Petrie, D.**, **Richardson, J.**, **Sia, K.-L.**, **Jackson, A.**, & **Harris, A.** (2017). Rapid review of wellbeing measures to assist disability support priority setting. Prepared for the *National Disability Insurance Agency, Australian Government*.
- Milner, A., King, T. L., LaMontagne, A. D., Aitken, Z., **Petrie, D.**, et al. (2017). Underemployment and its impacts on mental health among those with disabilities: Evidence from the HILDA cohort. *Journal of Epidemiology & Community Health*, *71*, 1198-1202.
- **Richardson, J.**, **Iezzi, A.**, & Maxwell, A. (2018). Does a patient's health potential affect the social valuation of health services? *PLoS ONE*, *13*, e0192585.

**Some of our major projects:**

- National Health and Medical Research Council Project (NHMRC) Centre of Research Excellence in Disability and Health. Petrie, D.
- Australian Research Council (ARC) Discovery Project (2017-2020) "*Disability, social mobility and the wellbeing of people with disabilities*" Petrie, D.

## Health areas

- NHMRC Partnership Grant (2018-2021) "*Youth cohort: Improving Disability Employment Study (Y-IDES)*" Petrie, D.
- National Disability Insurance Scheme (NDIS) "*Review of outcome measures for use in the economic evaluation of disability services and supports*".

**Our lead researchers**:

Evaluation of policy reforms around disability support services:
Sonja Kassenboehmer, Dennis Petrie

Mental health of people with disabilities:
Sonja Kassenboehmer, Dennis Petrie

Cost-effectiveness analysis of disability support services:
Anthony Harris, Dennis Petrie

Measurement of improvements of quality of life related to support and services:
Gang Chen

## Musculoskeletal Health

The program aims to establish the value of interventions to improve musculoskeletal health. It does both by collecting and analysing data within randomised clinical trials organised by collaborators, and by analysing survey and other observational data. Within-trial evaluation of the costs and benefits of the interventions is done using resource data collected in the trials, combined with administrative hospital and medical claims data. We also collect and analyse information on quality of life and productivity at work from participants. There is the potential for longer term simulation of the longer term costs and benefits of interventions.

**Some of our recent research explores:**

- Telemedicine: What are the costs and benefits of integrating exercise counselling and support into the Musculoskeletal Help Line for people with knee osteoarthritis?
- What are the costs and benefits of pain coping skills training in hip and knee osteoarthritis?
- What are the costs and benefits of intra-articular injections of platelet-rich plasma as a symptom- and disease-modifying treatment for knee osteoarthritis?
- Financial incentives for increasing exercise behaviour in people with osteoarthritis
- Social determinants of physical inactivity

**Some of our recent publications:**


- Paterson, K. L., Hunter, D. J., Metcalf, B. R., Eyles, J., Duong, V., . . . **Harris, A.**, et al. (2018). Efficacy of intra-articular injections of platelet-rich plasma as a symptom- and disease-modifying treatment for knee osteoarthritis - the RESTORE trial protocol. *BMC Musculoskeletal Disorders*, *19*, 272.
- Bennell, K. L., Campbell, P. K., Egerton, T., Metcalf, B., Kasza, J., . . . **Harris, A.**, et al. (2017). Telephone coaching to enhance a home-based physical activity program for knee osteoarthritis: A randomized clinical trial. *Arthritis Care & Research*, *69*, 590-602.
- Bennell, K. L., Ahamed, Y., Jull, G., Bryant, C., Hunt, M., . . . **Harris, A.**, et al. (2016). Physical therapist-delivered pain coping skills training and exercise for knee osteoarthritis: Randomized controlled trial. *Arthritis Care & Research*, *68*, 84-94.
- Hinman, R. S., McCrory, P., Pirotta, M., Relf, I., Forbes, A., . . . **Harris, A.**, et al. (2014). Acupuncture for chronic knee pain: A randomized clinical trial. *JAMA*, *312*, 1313-1322.
- Bennell, K. L., Egerton, T., Martin, J., Abbott, J. H., . . . **Harris, A.**, et al. (2014). Effect of physical therapy on pain and function in patients with hip osteoarthritis: A randomized clinical trial. *JAMA*, *311*, 1987-1997.
- **Harris, A.**, Youd, J., & Buchbinder, R. (2013). A comparison of directly elicited and pre-scored preference-based measures of quality of life: The case of adhesive capsulitis. *Quality of Life Research*, *22*, 2963-2971.


**Some of our major projects:**

- National Health and Medical Research Council (NHMRC) Australia and New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network (2018-2022) Harris, A.

## Health areas

- NHMRC Centre of Research Excellence in Translation of Research into Improved Outcomes in Musculoskeletal Pain and Health (TRIUMPH) (2014-2019) Harris, A.
- NHMRC Centre of Research Excellence in Translational Research in Musculoskeletal Pain. Harris, A.

**Our lead researchers**:

Economic evaluation alongside clinical trials in musculoskeletal conditions:
Anthony Harris

Changing behaviour among patients with musculoskeletal conditions:
Anthony Harris

## Cancer

Cancer is a major cause of illness in Australia and has a significant social and economic impact. Along with an aging population, the incidence of cancer is increasing and, in Australia, it is estimated that, 1 in 3 Australian men, and 1 in 4 women, will be diagnosed with cancer by the time they are aged 75.

Our research focuses on developing evidence to inform clinical and policy decisions to ensure efficient healthcare use and ultimately improve health outcomes for people diagnosed with cancer. One of our research strengths is accurately measuring the benefits and harms to health and wellbeing of cancer treatments in different patient populations. Another strength, is applying robust econometric analysis to complex longitudinal cancer data, including data from established cancer registries, to explore how different factors (including sociodemographic characteristics, policy changes and guideline changes) influence patient outcomes, healthcare professional / patient behaviours and healthcare resource use. We also undertake economic evaluations alongside cancer trials and develop models to estimate the long-term consequences of different cancer treatment decisions.

**Some of our recent research explores:**

- Eliciting health state utilities from breast cancer patients
- Health-related quality of life of esophageal cancer patients in daily life after treatment
- Assessing how the Prostrate Cancer Registry can affect clinician/hospital behaviour
- Assessing how the Prostrate Cancer Registry impacts clinician adherence to prostate cancer recommendations
- Evaluating the benefits and harms of breast cancer of different breast screening strategies
- Estimating the impact of patient and breast cancer characteristics on healthcare costs
- Improving decision-making in health technology assessments for cancer treatment
- Understand preferences for colorectal and cervical cancer screening, surveillance of Barrett's oesophagus, and breast cancer follow-up
- Economic evaluation of efficient surveillance of Barrett's oesophagus

**Some of our recent papers include:**


- Li, S., Wang, M., Liu, L., & **Chen, G.** (2019). Which approach is better in eliciting health state utilities from breast cancer patients? Evidence from mainland China. *European Journal of Cancer Care*, *28*, e12965.
- Bulamu, N. B., **Chen, G.**, Bright, T., Ratcliffe, J., Chung, A., et al. (2018). Preferences for surveillance of Barrett's Oesophagus: A discrete choice experiment. *Journal of Gastrointestinal Surgery*, forthcoming.
- Lindblad, M., Bright, T., Schloithe, A., Mayne, G. C., **Chen, G.**, et al. (2017). Toward more efficient surveillance of Barrett's Esophagus: Identification and exclusion of patients at low risk of cancer. *World Journal of Surgery*, *41*, 1023-1034.
- McCowan, C., Wang, S., Thompson, A. M., Makubate, B., & **Petrie, D. J.** (2013). The value of high adherence to tamoxifen in women with breast cancer: A community-based cohort study. *British Journal of Cancer*, *109*, 1172-1180.

## Health areas

**Some of our major projects:**

- NHMRC Project Grant "*A novel multi-gene marker blood test to increase community participation in colorectal cancer screening*" Chen, G.
- NHMRC Project Grant "*FIT for purpose: Personalised surveillance colonoscopy for people at increased risk of colorectal cancer*" Chen, G.
- Cancer Australia Priority-driven Collaborative Cancer Research Scheme (PdCCRS) Standard Project Grant "*Maximising benefits and minimising harms in the BreastScreen program: A population health economics modelling approach*" Petrie, D., & Saxby, K.
- Cancer Australia Priority-driven Collaborative Cancer Research Scheme (PdCCRS) Standard Project Grant "*Personalising treatment and surveillance for colorectal cancer: Prognostication with the circulating tumour-derived methylated DNA markers BCAT1 and IKZF1*" Chen, G.
- China Medical Board "*Management and intervention strategies for women with cervical precancerosis through screening programme in rural China*" Chen, G.
- Breast Cancer Campaign UK "*A community-based longitudinal study on adherence to endocrine therapy and cancer outcomes*" Petrie, D.

**Our lead researchers**:

Economic evaluations:
Gang Chen, Peter Ghijben, Dennis Petrie

Measuring benefits and harms on health and wellbeing:
Gang Chen

Econometric analysis using longitudinal data including cancer registries:
Peter Ghijben, Dennis Petrie

Measuring patient preferences for screening, surveillance, and treatment options:
Gang Chen

## The Environment and Health

Adverse environmental factors such as pollution, natural disasters, and extreme climate events can have serious impacts on people's lives. At the CHE, our research explores environmental issues in both the developed and developing world settings. In regards to developed countries, we have a particular interest in measuring the indirect effects of major climate events, such as the extent to which natural disasters affect people's physical and mental wellbeing. In the context of developing countries, we investigate the impacts of factors such as clean water, adequate sanitation, and environmental contamination; such as the extent to which faecal pollution and water insecurity affect the wellbeing of individuals and communities in informal "slum" settings. Using field, survey, and administrative data, analysed with advanced econometrics, we provide causal estimates that have important policy implications for environmental health policy, including relief and recovery management.

**Some of our recent research explores:**

- The impacts of natural disasters on mental and physical wellbeing.
- Revitalising Informal Settlements and their Environments (RISE) - interdisciplinary research into improving health and wellbeing of people living in informal settlements in Indonesia and Fiji.
- Perceptions towards disaster risk following large salient events.
- The effects of abnormal weather on attitudes towards climate change and pro-environmental behaviour.

**Some of our major projects:**

- Australian Research Council (ARC) Discovery Project (2017-2020) "*Microeconomic Impacts of Australian Natural Disasters*" Johnston, D.
- Wellcome Trust Research Partnership (2017-2022) "*Revitalising Informal Settlements and their Environments (RISE)*" Johnston, D.

**Our lead researchers**:

Microeconomic impacts of natural disasters and extreme weather events:
David Johnston, Rachel Knott

Health and wellbeing in informal settlements:
David Johnston, Rohan Sweeney

## Socioeconomic inequality

While the average health of the population is continuing to improve there remains large and persistent gaps between different groups in our society. In Australia, the most documented gaps are for Indigenous Australians but those with intellectual disabilities, low income and low education also live substantially shorter lives and often experience health problems at younger ages. Significant progress has been made on measuring socioeconomic health inequalities and understanding their causes, including key social determinants of health, but our understanding of what drives health inequalities is still incomplete and improved knowledge is vital for policy makers to design effective policies to tackle health inequities. We apply advanced econometric methods to better understand the causes of socioeconomic health inequalities including the extent to which inequalities are due to differences in opportunities. We also develop and apply advanced methods to monitor and evaluate levels of inequality and examine the equity implications of interventions and polices to inform policy decisions.

**Some of our recent publications:**

- Carvalho, N. **Petrie, D.** Chen, L. Salomon, J. Clarke, P. (2019). The impact of Medicare Part D on income-related inequality in pharmaceutical expenditure. International Journal for Equity in Health. 18:57.
- Crombie, I. Irvine, L. Williams, B. Sniehotta, F. **Petrie, D**., Achison, M. (2018) Texting to Reduce Alcohol Misuse (TRAM): main findings from a randomised controlled trial of a text message intervention to reduce binge drinking among disadvantaged men, *Addiction*, 113, 1609-1618.
- Carrieri, V. & **Jones, A.M**., 2018. Inequality of opportunity in health: A decomposition-based approach. *Health economics*, *27*(12), pp.1981-1995.
- **Black, N., Johnston, D.W., Shields, M.A.** and Suziedelyte, A., 2017. Who provides inconsistent reports of their health status? The importance of age, cognitive ability and socioeconomic status. *Social Science & Medicine*, *191*, pp.9-18.
- Kjellsson, G. & **Petrie, D.** (2017), *Graphical tools for monitoring inequality. The beauty can lie (in the details)*, *Epidemiology*, 28(4), p605-607.
- Farrell, L., Hollingsworth, B. P., Propper, C., & **Shields, M. A.** (2014). The socioeconomic gradient in physical inactivity: Evidence from one million adults in England. *Social Science & Medicine*, *123*, 55-63.
- **Johnston, D.W.**, Propper, C., Pudney, S.E. & **Shields, M.A.**, 2014. The income gradient in childhood mental health: all in the eye of the beholder? *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 177(4), pp.807-827.
- Allanson, P. & **Petrie, D.** (2013), Longitudinal methods to investigate the role of health determinants in the dynamics of income-related health inequality, *Journal of Health Economics*, 32(5), 922-37.

**Recently awarded major grants and fellowships**

- ARC Discovery Project. (2019-21) Economic stress, non-cognitive skill development and life outcomes. Sonja Kassenboehmer, $210,000

## Research themes

- NHMRC, Project Grant, (2018-22) A non-inferiority trial of Tailored Text Messaging versus Quitline for smoking cessation among low-socioeconomic status smokers. Petrie $1,764,855.
- ARC, Discovery project, (2017-19) Disability, social mobility and the wellbeing of people with disabilities. Petrie $403,500.
- NHMRC, Project grant, (2017-21) Adding an electronic-cigarette to standard behavioural treatment for low-socioeconomic status smokers: A randomised trial. Petrie. $1,381,127
- ARC, Discovery Early Career Researcher Award (DECRA), (2015-18) Understanding the dynamics of socioeconomic-related health inequalities in Australia, Petrie. $328,614.
- NHMRC, Centre for Research Excellence, (2017-21). Disability and Health. Petrie $2,487,345

**Our lead researchers:**

Inequalities in health:
Dennis Petrie

Inequalities of opportunity:
Andrew Jones

Socioeconomic determinants of health:
Michael Shields, David Johnston, Nicole Black, Sonja Kassenboehmer

## Global Health

People residing in developing country settings experience, on average, much poorer health and significantly shorter life expectancies than those residing in Australia and other wealthier settings. This is a consequence of extreme poverty, limited basic infrastructure, and severely constrained health systems, which place people at higher risk of numerous diseases and other environmental risks to health and life.

At the CHE, we employ a range of health economics approaches to investigate various policy-relevant issues associated with health financing and health service delivery in developing country settings. We also empirically explore the factors that affect the health and wellbeing of people living in urban, informal "slum" settlements; where around 1 billion of the world's population now reside.

**Some of our recent research explores:**

- The relative cost and efficiency of health care via primary, secondary and tertiary care in low-income settings.
- The impact of foreign aid on health outcomes, funding flows and donor commitment in aid-recipient countries.
- The impact of monetary and non-monetary incentives on pro-social behaviours such as blood donation.
- Interdisciplinary research into factors affecting health and wellbeing of people living in informal settlements in Indonesia and Fiji.
- The socioeconomic impacts of HIV on households in Myanmar.

**Some of our recent papers include:**

- **Sweeney, R.**, Suhrcke, M., Jeon, Y. J., & **Mortimer, D.** (2018). The impact of SWAps on health aid displacement of domestic health expenditure. *The Journal of Development Studies*, *54*, 719-737.
- **Sweeney, R.**, & **Mortimer, D.** (2016). Has the SWAp influenced aid flows in the health sector? *Health Economics*, *25*, 559-577.
- **Lorgelly, P.**, Gilbert, K., **Mortimer, D.**, **Black, N.**, **Sweeney, R.**, et al. (2015). Solomon Islands - Health facilities costing study. Washington, DC: World Bank. Group.
- **Sweeney, R.**, **Mortimer, D.**, & **Johnston, D.** (2014). Further investigations of the donor-flight response. *Social Science & Medicine*, *113*, 179-182.
- **Sweeney, R.**, **Mortimer, D.**, & **Johnston, D.** (2014). Do Sector-Wide Approaches for health aid delivery lead to 'donor flight'? A comparison of 46 low-income countries. *Social Science & Medicine*, *105*, 38-46.
- **Mortimer, D.**, **Ghijben, P.**, **Harris, A.**, & **Hollingsworth, B.** (2013). Incentive-based and non-incentive-based interventions for increasing blood donation. *Cochrane Database of Systematic Reviews*, *1*, CD010295.

## Research themes

**Some of our major projects:**

- Wellcome Trust, Interdisciplinary Research Partnership (2017-2022) "*Health and economic benefits of water-sensitive revitalisation in informal urban settlements*" (A$17,464,389) Johnston, D.
- World Bank Selection (2013-2014) "*Health facility costing in Solomon Islands*" (US$470,512) Lorgelly, P., Mortimer, D., Black, N., & Sweeney, R.
- Asian Development Bank (2008-2010) "*Costs and efficiency of primary health care services in Papua New Guinea*" (US$360,000) Sweeney, R.

**Our lead researchers**:

Health and wellbeing in developing countries:
David Johnston, Rohan Sweeney

Health financing in developing countries:
Maame Esi-Woode, Duncan Mortimer, Rohan Sweeney

## Measurement of Health and Quality of Life

To evaluate policies and interventions, it is important to be able to robustly measure their impact on health, quality of life, and wellbeing.

The economic evaluation of health services commonly combines the impact on both the quality and quantity of life in cost utility analyses (CUA) to rank alternative services, according to the cost of obtaining an additional quality-adjusted life-year (QALY). The measurement of QALYs has increasingly employed preference-based health-related quality of life (HRQoL) instruments. To capture the broader impact of policies and interventions, there has been increasing interest in the measurement of subjective wellbeing. How should we elicit the strength of preferences for different quality of life domains from individuals? Are health state utilities or measures of wellbeing elicited from different methods comparable? If not, how can we further improve their comparability?

We have also applied econometric techniques to investigate what self-assessed health really captures in the commonly used (household) surveys. What individual characteristics influence the way health is self-reported, and how reliable is it?

There is greater recognition that policies have intended and unintended consequences for health, quality of life, and wellbeing. The answers to these questions would have a profound effect on the outcome of economic evaluation studies and the wellbeing of people.

**Some of our recent research includes:**

- The development of the Assessment of Quality of Life (AQoL) instrument (AQoL-4D, AQoL-6D, AQoL-7D, AQoL-8D, VisQoL) for use in economic evaluation studies
- The development of country-specific tariffs for a child and adolescent-specific quality of life instrument, namely the Child Health Utility 9D (CHU9D)
- The development of individualised preference weights for subjective outcome measures
- The sensitivity and validity of preference-based health-related quality of life (multiattribute utility) instruments for different diseases
- The construction of mapping (crosswalk) algorithms to predict health state utility scores from non-preference based HRQoL instruments
- An exploration of the complementary and supplementary relationships between quality of life and subjective wellbeing instruments
- Measuring quality of life and wellbeing for people with disabilities
- The role of age, cognitive ability, and socioeconomic status in reporting health status
- Justification bias: the influence of employment status on changes in reported health status

**Some of our recent publications:**

**Quality of Life**

**Richardson, J.**, **Khan, M. A.**, **Iezzi, A.**, **Chen, G.**, & **Maxwell, A.** (2016). Measuring the sensitivity and construct validity of 6 utility instruments in 7 disease areas. *Medical Decision Making*, *36*, 147-159.

**Chen, G.**, **Khan, M. A.**, **Iezzi, A.**, Ratcliffe, J., & **Richardson, J.** (2016). Mapping between 6 multiattribute utility instruments. *Medical Decision Making*, *36*, 160-175.

**Chen, G.**, **Petrie, D.**, **Richardson, J.**, **Sia, K.-L.**, **Jackson, A.**, & **Harris, A.** (2017). Rapid review of wellbeing measures to assist disability support priority setting. Prepared for the National Disability Insurance Agency, Australian Government.

**Chen, G.**, Ratcliffe, J., Kaambwa, B., McCaffrey, N., & **Richardson, J.** (2018). Empirical comparison between capability and two health-related quality of life measures. *Social Indicators Research*, *140*, 175-190.

**Chen, G.**, Xu, F., Huynh, E., Wang, Z., Li, C., Stevens, K., & Ratcliffe, J. (2019). Scoring the Child Health Utility 9D instrument: Estimation of a Chinese child and adolescent-specific tariff. *Quality of Life Research*, *28*, 163-176.

Ishaque, S., Karnon, J., **Chen, G.**, Nair, R., & Salter, A. B. (2019). A systematic review of randomised controlled trials evaluating the use of patient-reported outcome measures (PROMs). *Quality of Life Research*, *28*, 567-592.

**Measurement of Health**

**Johnston, D.**, Propper, C., Pudney, S., & **Shields, M.** (2014). Child mental health and educational attainment: Multiple observers and the measurement error problem. *Journal of Applied Econometrics*, *29*, 880-900.

**Au, N.**, & **Johnston, D. W.** (2014). Self-assessed health: What does it mean and what does it hide? *Social Science & Medicine*, *121*, 21-28.

**Knott, R. J.**, Lorgelly, P. K., **Black, N.**, & Hollingsworth, B. (2017). Differential item functioning in quality of life measurement: An analysis using anchoring vignettes. *Social Science & Medicine*, *190*, 247-255.

**Knott, R. J.**, **Black, N.**, Hollingsworth, B., & Lorgelly, P. K. (2017). Response-scale heterogeneity in the EQ-5D. *Health Economics Letter*, *26*, 387-394.

**Black, N.**, **Johnston, D. W.**, **Shields, M. A.**, & Suziedelyte, A. (2017). Who provides inconsistent reports of their health status? The importance of age, cognitive ability and socioeconomic status. *Social Science & Medicine*, *191*, 9-18.

**Black, N.**, **Johnston, D. W.**, & Suziedelyte, A. (2017). Justification bias in self-reported disability: New evidence from panel data. *Journal of Health Economics*, 54, 124-134.

**Some of our major projects:**

- Australian Research Council (ARC) DECRA (2018-2021) "*What do Australians really care about? New survey and experimental evidence*" Chen, G.
- National Health and Medical Research Council Project (NHMRC) Project Grant (2016-2019) "*Determining the best outcome measures for assessing cost-effectiveness of interventions for childhood mental disorders*" Richardson, J., & Chen, G.

## Research themes

- Transport Accident Commission (TAC) Research Project (2018-2019) "Assessing the measurement properties of the TAC's Life Back on Track measure" Chen, G., & Harris, A.
- Research Council of Norway Research Programme on Better Health and Quality of Life (2018-2021) "*tracing causes of inequalities in health and well-Being: Analysis of rich longitudinal data*" Chen, G.
- National Natural Science Foundation of China (NSFC) General Program (2017-2020) "*A framework for eliciting health state utility scores using a discrete choice experiment in China: An application based on the SF-6D*" Chen, G.

**Our lead researchers**:

Quality of life and subjective wellbeing measurements:
Gang Chen, Anthony Harris, Dennis Petrie

Reliability of survey measures of health:
Nicole Black, David Johnston, Rachel Knott, Michael Shields

## Health Systems

Well-functioning health systems are essential for maximising population health, minimising the financial consequences of ill-health, and ensuring equitable access to health care.

Health systems research considers 'macro' questions such as 'how much should we spend on health care?', 'how should we finance health care expenditure?', and 'should health care be publicly or privately provided?'

'Meso' and 'micro' questions have also drawn the attention of health systems researchers including: 'how should funding be allocated to maximise population health?', 'what factors influence whether a new drug or medical device receives government subsidy?', and 'what is the impact of patient co-payments on the health care utilisation and health outcomes of different groups?'

Answering such a diverse set of questions requires a diversity of methodological approaches. Health systems research at the CHE makes use of advanced econometrics, priority setting methods such as multi-criteria decision analysis (MCDA) and programme budgeting and marginal analysis (PBMA), discrete choice experiments (DCEs), and qualitative methods. Findings from this research have helped to refine policy-settings in Australia, United Kingdom, Netherlands, China and many other health systems around the world.

**Some of our recent research explores:**

- The impact of publicly subsidised health insurance on access, behaviour and disease management.
- The impact of foreign aid on health outcomes, funding flows, and donor commitment in aid-recipient countries.
- The impact of cost containment measures and relative bargaining power on pricing, access, and expenditure for pharmaceuticals.
- The impact of healthcare consolidation and medical technology diffusion on the efficiency, and equity of public healthcare provision.
- The impact of competition on health outcomes, productivity, and expenditure.
- The impact of health insurance and health care reform in China.

**Some of our recent papers include:**

- Miraldo, M., **Propper, C.**, & Williams, R. I. (2018). The impact of publicly subsidised health insurance on access, behavioural risk factors and disease management. *Social Science & Medicine*, *217*, 135-151.
- **Richardson, J.**, **Iezzi, A.**, Maxwell, A., & **Chen, G.** (2018). Does the use of proportional shortfall help align the prioritisation of health services with public preferences? *The European Journal of Health Economics*, *19*, 797-806.
- Krabbe-Alkemade, Y., Groot, T., & **Lindeboom, M.** (2017). Competition in the Dutch hospital sector: An analysis of health care volume and cost. *The European Journal of Health Economics*, *18*, 139-153.
- Srivastava, P., **Chen, G.**, & **Harris, A.** (2017). Oral health, dental insurance and dental service use in Australia. *Health Economics*, *26*, 35-53.

## Research themes

- **Sweeney, R.**, & **Mortimer, D.** (2016). Has the SWAp influenced aid flows in the health sector? *Health Economics*, *25*, 559-577.
- **Lindeboom, M.**, van der Klaauw, B., & Vriend, S. (2016). Audit rates and compliance: A field experiment in care provision. *Journal of Economic Behavior & Organization*, *131*, 160-173.
- **Knott, R.**, **Petrie, D.**, Heeley, E., Chalmers, J., & Clarke, P. (2015). The effects of reduced copayments on discontinuation and adherence failure to statin medication in Australia. *Health Policy*, *119*, 620-627.
- Barnieh, L., Clement, F., **Harris, A.**, Blom, M., Donaldson, C., et al. (2014). A systematic review of cost-sharing strategies used within publicly-funded drug plans in member countries of the Organisation for Economic Co-operation and Development. *PLoS ONE*, *9*, e90434.
- Bolhaar, J., **Lindeboom, M.**, & van der Klaauw, B. (2012). A dynamic analysis of the demand for health insurance and health care. *European Economic Review*, *56*, 669-690.
- **Avdic, D**., Lundborg, P. and Vikström J. (2018), Estimating Returns to Hospital Volume: Evidence from Advanced Cancer Surgery, *Journal of Health Economics*, 63, pp. 81–99.
- **Avdic, D**. (2016), Improving Efficiency or Impairing Access? Health Care Consolidation and Quality of Care: Evidence from Emergency Hospital Closures in Sweden. *Journal of Health Economics*, 48, pp. 44–60.

**Some of our major projects:**

- China Medical Board (CMB) Open Competition Grant (2016-2018) "*The impact evaluation of clinician training on the quality of primary and secondary healthcare services within health alliances in Western China*" (US$150,000) Chen, G.
- World Bank Selection (2013-2014) "*Health facility costing in Solomon Islands*" (US$470,512) Lorgelly, P., Mortimer, D., Black, N., & Sweeney, R.
- Australian Research Council (ARC) Discovery Grant (2010-2012) "*Bargaining and the price of new pharmaceuticals in Australia: An empirical analysis*" (A$115,000) Harris, A., & Mortimer, D.

**Our lead researchers**:

Priority setting in health care:
Gang Chen, Duncan Mortimer

Health financing:
Anthony Harris, Rachel Knott, Duncan Mortimer, Dennis Petrie, Rohan Sweeney, Daniel Avdic

Health care costs and utilisation:
Nicole Black, Gang Chen, Rachel Knott, Dennis Petrie, Daniel Avdic

## Economic Evaluation

For further information on the Centre's current research and staff working within this area, please contact Shannon Stanwell by email.

Shannon.Stanwell@monash.edu