

# POSITION DESCRIPTION

Centre for Health Policy Melbourne School of Global and Population Health Faculty of Medicine, Dentistry and Health Sciences

# Research Fellow/Senior Research Fellow – Data Analytics

POSITION NO	0057460
CLASSIFICATION	Research Fellow (Level B) or Senior Research Fellow (Level C)
SALARY	Level B - \$110,236 - \$130,900; Level C - \$135,032 - \$155,698, Pro-rata for part time
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Part time or Full time (0.8 – 1.0FTE)
BASIS OF EMPLOYMENT	Fixed term for 3 years
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Adam Elshaug
	Director, Centre for Health Policy, Melbourne School of Population and Global Health, Faculty of Medicine, Dentistry and Health Sciences
	E-mail: adam.elshaug@unimelb.edu.au Please do not send your application to this contact

For information about working for the University of Melbourne, visit our website: about.unimelb.edu.au/careers

Date Created: dd/mm/yyyy Last Reviewed: dd/mm/yyyy Next Review Due: dd/mm/yyyy

# Acknowledgement of Country

The University of Melbourne would like to acknowledge and pay respect to the Traditional Owners of the lands upon which our campuses are situated, the Wurundjeri and Boon Wurrung peoples, the Yorta Nation, the Dja Wurrung people. We acknowledge that the land on which we meet and learn was the place of age-old ceremonies, of celebration, initiation and renewal, and that the local Aboriginal peoples have had and continue to have a unique role in the life of these lands.

# **Position Summary**

The Centre for Health Policy has diverse expertise and research interests spanning health economics and health services research. We foster a cross-disciplinary research and policy translation environment with the goals of delivering value-based health care solutions, underpinned by the analysis of health data, including but not limited to clinical and routinely collected data. We work closely with external stakeholders to co-design key questions of most relevance to end-users, and we undertake our own (independent) investigator-initiated analyses. These address key issues related to the judicious use of health care services (including high and low-value care), the consequences of high and low-value care including resource use and costs and relative cost-effectiveness of health care services.

This Research Fellow/Senior Research Fellow will carry out work under direction from Centre Director, Professor Adam Elshaug and Head of School, Professor Nancy Baxter. Professor Elshaug has developed a large program of work measuring and reducing waste (e.g., low-value care) to optimize value in health care, an area in which he and his team have developed novel, award winning methods utilising administrative health data. The program includes collaborations with Commonwealth and State health departments, private health insurers, and other actors within healthcare. Professor Baxter has extensive experience examining health service utilisation patterns using large datasets. There is also an arm of the work program that sets out investigator-initiated research questions, independent of stakeholder partners.

The Fellow/Senior Fellow will work across the entire program, focusing initially on two projects with stakeholder partners; the first is applying existing methods to provide low-value care metrics to new partners; the second is calculating the impact of the COVID19 pandemic on Australian in-hospital health service utilisation, with cross-country comparisons provided by partners. Finally, the successful candidate will grow elements of the work program, for example, measuring the full spectrum of harms associated with inappropriate healthcare; applying and further developing methods for measuring the carbon footprint of healthcare.

For this position the candidate will need to hold requisite expertise to apply methods/undertake analyses as applied in these projects (within the Australian context), as examples:

https://pubmed.ncbi.nlm.nih.gov/33640924/

https://pubmed.ncbi.nlm.nih.gov/33899084/

https://pubmed.ncbi.nlm.nih.gov/29506573/

https://pubmed.ncbi.nlm.nih.gov/30082331/

We foster a values-based culture of innovation and creativity to enhance the research performance of the University and to achieve excellence in teaching and research outcomes.

We invest in developing the careers and wellbeing of our students and staff and expect all our leaders to live our values of:

- Collaboration and teamwork
- Compassion

- Respect
- Integrity
- Accountability

# 1. Key Responsibilities

## 1.1 RESEARCH AND RESEARCH TRAINING

- With broad direction from supervisor/s, independently conduct data analytics components of the research project/s
- With broad direction from supervisor/s, including stakeholder partners, further develop data analytic methods and/or applications thereof to support the research project/s
- Produce innovative data visualisation outputs
- Collaborate with other researchers, the clinical community and other stakeholders from government, industry and NGOs to co-design research questions and analytic approaches
- Produce, independently, high quality first draft research outputs to be published in peer review journals, as well as technical reports, presentations, and social/mainstream media content
- Take initiative for and develop grant applications applying for (additional) research funding
- Conduct formal supervision, mentoring and data analytic assistance/training for postgraduate students and other researchers

## 1.2 TEACHING AND LEARNING

This is a research focused role however the candidate will be encouraged to participate at a low level (e.g., guest lectures) in teaching and learning activities in the Centre for Health Policy and School

## 1.3 ENGAGEMENT

- Respond to enquiries from external stakeholders and other groups, including enquiries from co-investigators and collaborators, departments of health and external researchers
- Work collaboratively with external partners to co-design research questions and solutions
- Manage project timelines and deliverables involving external partners
- Proactively seek to expand and foster the network of collaborators, external research partners and stakeholders

## 1.4 SERVICE AND LEADERSHIP

- Provide service to the University and actively participate in meetings and committees as appropriate
- Other duties commensurate with the position as directed by the Supervisor.
- Occupational Health and Safety (OH&S) responsibilities as outlined in section 4.

The responsibilities as specified above may be altered in accordance with the changing requirements of the position.

## 2. Selection Criteria

## 2.1 ESSENTIAL

- A PhD\* or similar degree in relevant health or related discipline: Biostatistics, Epidemiology, Public Health, Psychology, Health Economics, Mathematics or other quantitative discipline (including computer science, bioinformatics, or engineering with applied knowledge/experience in the medical or health field). \*Note, applications will be considered from those whose PhD is under examination.
- Demonstrated experience in statistical analysis of routinely collected and/or longitudinal survey data using statistic packages such as SAS, STATA, R, MLwiN, SPSS, SQL
- A moderate-high level understanding of the Australian health care system
- Experience conducting analyses within large Australian population-based health administrative databases, including but not limited to state-based inpatient datasets such as the Victorian Admitted Episodes Dataset (VAED) or New South Wales Admitted Patient Data Collection (APDC) or equivalent, with requisite expertise to conduct analyses per the sample of studies listed above
- Experience in managing large datasets, including ethics clearance processes, and knowledge of data integrity, quality and completeness
- Demonstrated ability to work collaboratively within a research team to achieve project goals and meet deadlines
- Experience leading and contributing to peer review publications, government or other technical reports, conference presentations and the preparation of research grant applications commensurate with opportunity
- Strong creativity and problem-solving abilities, able to work semi-independently

## In addition, for appointment to Senior Research Fellow (Level C)

- Track record in attracting competitive research funding as CIA
- Track record supervising Honours, Masters or PhD candidates

## 2.2 DESIRABLE

- Quantitative research experience including (advanced) data analyses and cost analysis within healthcare, and knowledge of value-based healthcare principles
- Experience conducting analyses within data from the Medicare Benefits Schedule; Pharmaceutical Benefits Schedule (including the linked MBS/PBS datasets
- Demonstrated ability to work constructively with external partners such as government agencies, industry, hospital administrators and with researchers from other disciplines
- Demonstrated experience producing innovative data visualisation outputs
- Experience with supervision of graduate research students
- Excellent writing skills

## 2.3 OTHER JOB RELATED INFORMATION

## 2. May involve some local and or interstate travel

Collaborations with international partners my require virtual meetings to take place out of usual business hours

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# 3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

# 4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

# 5. Other Information

## 5.1 CENTRE FOR HEALTH POLICY

The Centre for Health Policy (CHP) strives to identify, critique, co-design, implement and evaluate policy options that protect the health of populations; to formulate, with partners, strategies that improve access, organisation, and delivery of health services or programs,

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particularly as they affect the most vulnerable; and to identify strategies for enhancing the safety, effectiveness and efficiency of health care systems in addressing the most pressing health and care challenges.

We offer a leading independent voice on health policy, generating new evidence and insights to inform debates and strengthen health care decision making. The Centre boasts a diverse, interdisciplinary group of scholars including health economists, evaluation and implementation scientists, clinicians, social scientists, legal scholars, policy analysts, sociologists, political scientists, demographers and executive managers. In 2022 the Centre comprised over 60 academic and professional staff, as well as 35 honorary staff representing a diverse group of experts from industry, government and NGO sectors. Many staff members serve as advisors to federal, state, and international organisations.

The Centre for Health Policy has six broad streams:

Cancer Health Services Research

**Demography and Ageing** 

**Evaluation and Implementation Science** 

**Health Economics** 

**Healthy Housing** 

Law and Public Health

The Centre is also the coordinating home to M-VAC, the Melbourne Health Technology and Value Assessment Collaborative, established in 2021 and contracted to conduct value-based assessments and evaluations of pharmaceuticals, health services and technologies, preventive and curative programs, and digital health applications. M-VAC provides a comprehensive stream of research, consultancy and advisory services to underpin value-based health care agendas, and reforms.

https://mspgh.unimelb.edu.au/centres-institutes/centre-for-health-policy

## 5.2 THE MELBOURNE SCHOOL OF POPULATION AND GLOBAL HEALTH

## www.mspgh.unimelb.edu.au/

The Melbourne School of Population Health was established in the Faculty of Medicine, Dentistry and Health Sciences in 2001. It became the Melbourne School of Population and Global Health in 2013. Approximately 300 academic and professional staff people work in the School and its partner agencies. The School's total budget is in excess of \$85m. There are approximately 120 higher degree research students (predominantly PhD). The School aims to strengthen the understanding, capacity and services of society to meet population health needs and to improve the quality and equity of health care. It employs a population health framework that incorporates public health and preventative medicine, health promotion, clinical medicine and allied healthcare disciplines and an equity and evidence-based approach to health care and health policy. Its research programs aim to elucidate the genetic, environmental, social and economic determinants of health, and to focus on the evaluation of the health systems, programs and services that seek to prevent disease and injury and to promote health. The School provides research and professional development opportunities for medical undergraduates, postgraduates in a wide range of disciplines, clinicians in all sectors of the health care industry, scientists, professionals and leaders in population health.

The School is currently composed of four Centres and two Institutes:

#### Centres

Centre for Health Equity (CHE)

Centre for Health Policy (CHP)

Centre for Epidemiology and Biostatistics (CEB)

Centre for Mental Health (CMH)

## Institutes

The Nossal Institute for Global Health (NIGH)

The Melbourne Disability Institute (MDI)

## 5.3 BUDGET DIVISION

The Faculty of Medicine, Dentistry and Health Sciences (MDHS) plays a vital role in the delivery of the University of Melbourne's Strategic Plan 2015-2020: Growing Esteem by providing current and future generations with education and research equal to the best in the world. It is Australia's largest and leading biomedical research faculty. It employs more than 1,700 members of staff, has more than 8,000 students, and total revenue of >\$850 million for 2020. Reflecting the complexity of today's global health landscape, the Faculty is made up of six different Schools and four Strategic Research Initiatives, and draws together all areas of human health, ranging from the most basic to the most applied areas of research. The Faculty contributes close to 50% of the research conducted at the University.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University-wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment,

Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

## 5.4 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers

## 5.5 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.
- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.
- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.
- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

## 5.6 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at https://about.unimelb.edu.au/strategy/governance