**UQ Winter Research Project Description**

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| **Project title:** | **Weighting approaches in a multi-membership analysis of a First Nations primary healthcare data: literature review** |
| **hours of engagement & delivery mode** | Prospective student is expected to commit approximately 30 hours per week during the 4 weeks program timeline. Remote working arrangement will be considered. However, student is expected to spend half of the time at the UQ Poche Centre for Indigenous Health Toowong office. |
| **Description:** | The Institute for Urban Indigenous Health (IUIH) in partnership with the UQ Poche Centre for Indigenous Health is undertaking an evaluation of Indigenous-led patient-centred medical home model of team-based primary care that is patient-centred, coordinated, accessible, and focused on quality and safety. The Institute for Urban Indigenous Health (IUIH) Ltd is a not-for-profit, Aboriginal and Torres Strait Islander Community Controlled Organization which leads the planning, development and delivery of comprehensive primary health care to Indigenous communities of the South East Queensland Region.  The UQ Poche Centre for Indigenous Health is an Aboriginal and Torres Strait Islander-led Health Research Institute at the University of Queensland working together with a multidisciplinary team of Aboriginal and Torres Strait Islander and non-Indigenous researchers to enhance understandings of diverse health issues affecting Indigenous peoples. Our focus is to improve life expectancy and transform equity and justice in Indigenous health.The study is a mixed-methods prospective cohort study, using a hybrid implementation and clinical effectiveness design where the effect of the intervention (IUIH System of Care 2) on outcomes is tested while gathering information on implementation. The main study outcomes include changes in access, quality of care, clinical outcomes, and hospitalisations/emergency department presentations.Given that patients tend to attend multiple services and or see multiple care teams for their care, the analysis will require a novel approach using ‘multiple membership models”. The use of a multi-membership model requires selection of weights that reflect the contribution of each care team/service and their relationship to the patient outcomes. The choice of weights can either be based on theory, when a strong theoretical basis exists, or an empirical assessment using statistical information criterion such as the Deviance Information Criterion. This literature review will provide insight from a First Nations primary health care perspective on theories (systems, cultural, social, etc) and/or statistical bases for weighting in multi-membership modelling of a First Nations data. |
| **Expected outcomes and deliverables:** | Scholars will gain skills in systematic and scoping reviews more broadly. This includes (but not limited) to learning how to:1. conduct literature search, analysis, and synthesis;
2. critically evaluate and organise information;
3. gain interdisciplinary knowledge on application of multiple-membership model and weighting approaches in First Nations primary healthcare research space;
4. understand when to use discrete and continuous weights, while recognising the difference between fixed and adaptive weights;
5. how weights affect results and interpretability

Overall, the scholar will have the opportunity to contribute to a body of work that can inform future research and guides practitioners in choosing appropriate weighting methods within a First Nations primary health care research space. |
| **Suitable for:** | This project is open to applications from students with a background in Public Health, Epidemiology and Biostatistics and in their 3rd or final year. |
| **Primary Supervisor:** | Please insert supervisor name(s)*Dr Victor Oguoma* *v.oguoma@uq.edu.au* |
| **Further info:** | If you would like applicants to contact your unit for further information, please provide the relevant contact details here. Please highlight if the supervisor wishes to be contacted by students prior to submitting an application. |