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Swansea University  
Prifysgol Abertawe

## Linked data and inclusion health: Harmonised international data linkage to identify determinants of health inequalities

Young, J<sup>1</sup>, Borschmann, R<sup>2</sup>, Camacho, X<sup>1</sup>, Knight, J<sup>1</sup>, Kouyoumdjian, F<sup>3</sup>, Janjua, N<sup>4</sup>, Atkinson, J<sup>5</sup>, and Kinner, S<sup>2</sup>

<sup>1</sup>The University of Melbourne

<sup>2</sup>Murdoch Children's Research Institute

<sup>3</sup>McMaster University

<sup>4</sup>British Columbia Centre for Disease Control

<sup>5</sup>University of Otago

A recent article in *The Lancet* establishing the principles of inclusion health, highlighted substantial gaps in our understanding of the drivers of health inequalities in socially excluded groups such as people with a history of incarceration, people who experience homelessness, sex workers, people with mental illness, and people who inject drugs<sup>1</sup>. Cross-sectoral data linkage of electronic health records with services working with socially excluded groups was one of the key recommendations of this article. The magnitude of health disparities observed in people that experience social exclusion necessitates an international public health response and addressing the determinants of social exclusion has been identified as a key component of closing the gap of Indigenous disadvantage<sup>2</sup>. This symposium will establish data linkage as a key component of the inclusion health and will complement the efforts of the Pan American Health Organization's (PAHO) Commission on Equity and Health Inequalities in the Americas.

Traditional survey methodology is costly and often results in studies that are highly parochial in nature. Due to difficulties recruiting and retaining marginalized groups, these studies are commonly forced to adopt methodological concessions, often selecting the most convenient participants (i.e., selection bias) or incurring increased rates of loss-to-follow-up (i.e., attrition bias). Conversely, global studies aimed at modelling the burden of disease are often not sufficiently nuanced to answer specific inferential research questions. Data-linkage has the potential to overcome these common biases and limitations. Thus, harmonised international data-linkage studies are an important component of the inclusion health response to identify the determinants of health inequalities in socially excluded groups and inform the global inclusion health agenda.

This symposium will bring together facilitators from three countries with extensive experience conducting data linkage studies that generate evidence on health and social inequality in socially excluded groups. Using a current multinational study as an example, barriers to international data-linkage studies, methodological solutions, and distributed approaches to generating international comparative evidence will be presented. Innovative examples of cross-sectoral approaches to

linkage with social service, correctional and national survey data will be discussed. The development of a novel framework for identifying social exclusion exposures and determinants of health inequalities typically not captured in administrative health data will also be discussed. The session will conclude with a discussion aimed at forming the foundation of an international data linkage project to address these current gaps identified in the inclusion health series and best practice for translation to policy and practice to address health disparities in socially excluded groups.

## References

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2. Greenwood M et al. Challenges in health equity for Indigenous peoples in Canada. *The Lancet*. 2018;Epub ahead of print. [https://doi.org/10.1016/S0140-6736\(18\)30177-6](https://doi.org/10.1016/S0140-6736(18)30177-6)

