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Multi-Agency Data Integration Project - Linking Data - Improving Lives

Kindermann, Bindi^{1*}, Hinde, Sarah¹, and Abbondante, Michael¹

¹Australian Bureau of Statistics

Objectives

The Australian Government's new public sector data management agenda is initiating a national system for integrating public data and opening up access for policy makers and researchers. The Multi-agency Data Integration Project ('the project') is central to achieving these goals by bringing together nationally significant population datasets with the aim of streamlining the safe sharing of integrated government data. The project provides policy makers and researchers with safe access to linked, longitudinal information about the delivery of the Australian tax and transfer system, health services, along with rich demographic information. The project has been an essential step towards better enabling the Australian Government and research community to develop evidence-based policy and target services effectively, within a tight fiscal environment. The project has prompted government agencies to find new and more streamlined ways to work collaboratively to share and make best use of public data.

represented. The work is confirming the value of the linkage for answering policy questions that had been difficult to address using existing approaches. The project developed ways of describing linkage quality to policy users and approaches to addressing linkage bias for different policy uses.

Conclusion

Public sector data held by government has the power to improve life course outcomes for Australian people, households and businesses. The project has generated confidence and support for continued development of a central and streamlined integrated data system. It has also generated valuable insights about governance and how to scale up the linkage and dissemination system to support additional datasets and longitudinal data. This will maximise the value and utility of public data to support policy and research, in order to achieve a better understanding of, and deliver better outcomes for, the Australian community.

Approach

The first step of the project was to link a 2011 snapshot of four national administrative datasets with the 2011 Census. A cross-agency team of data analysts from five government agencies collaborated to evaluate the datasets and test whether the linked data could be used to answer policy questions. The linkage project included experimentation with different linking methodologies, linking strategies and information models for structuring the linkage. The evaluation tested whether the linked data was representative of key population groups of interest, and explored the validity of the content variables for measuring outcomes of interest.

Results

High linkage rates (between 80-95%) were achieved for the two-way linkages, and many population groups of interest were well

*Corresponding Author:

Email Address: bindi.kindermann@abs.gov.au (B. Kindermann)