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From Consultation to Innovation: A Data Access Pathways Tool to Navigate Australia's Linked Data Landscape

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Background

Australia's administrative data linkage environment has evolved from state-based repositories used for internal reporting, to an ecosystem of national linked data assets alongside bespoke linkage services. This has increased complexity for researchers seeking linked data access. A 2024 national consultation identified a need for tools to support transparent exploration of researcher-appropriate access pathways.

offers a model for strengthening national data infrastructure and facilitating population data research globally.

Methods

The Population Health Research Network led a researcher-centred, co-design process with data linkage units, Commonwealth organisations, and research end-users to develop the Data Access Pathways tool, an online decision-support tool that enables researchers to input their project parameters and discover access pathway options. Tool development involved specification of pathway logic, business rules, wireframes, and iterative user testing.

Results

Access pathways present different ethics, governance and operational requirements, and importantly variations in data breadth and granularity. Such complex challenges also exist in federated or multi-agency linkage systems internationally (e.g., Canada, UK). The Data Access Pathways tool demonstrates that structured decision logic embedded in a user-friendly tool can simplify the complexity by supplying pathway options, guidance and contact points — building researcher capacity, reducing planning overhead, and promoting equitable access.

Conclusions

The Data Access Pathways tool translates national-level consultation and stakeholder collaboration into practical, scalable infrastructure. Although developed for Australia, the underlying principles — neutrality, transparency, co-design, and flexible decision logic — are broadly applicable to other systems with fragmented or evolving linkage landscapes. This work

