

Improving access to data... and making better use of it through data linkage

Well-managed and effectively presented on-line interactive data can provide detailed and timely information while preserving confidentiality. Interactive data products complement our published reports in providing more flexible access and outputs for those who need and want this.

The Institute has made a wide range of data available on its website in an accessible and interactive format. There are interactive Excel spreadsheets and pivot tables, data catalogues (HTML-based) and interactive COGNOS data cubes. Work is underway to add other data cubes, including public hospital establishments, welfare expenditure and disease expenditure.

Feedback from users indicates that the interactive data are well used. Importantly, interactive data enable Institute staff to spend more time on core work while clients save money by running their own custom data queries and getting the answers automatically.

Data that are currently accessible online include:

- Alcohol and other drug treatment data cubes
- Australian Cancer and Mortality (ACIM) data
- Chronic disease indicators
- Disability data cubes
- Expenditure data cubes
- General practice data

- General Record of Incidence of Mortality (GRIM)
- Mental health admitted patient data cubes
- METeOR
- National hospital morbidity data cubes
- Elective surgery waiting times interactive data
- Risk factor data
- Indigenous data on housing and household conditions (Fixing Houses for Better Health)

Public Hospital Establishments data cubes (pending).

Linking national data is another area where the AIHW already has demonstrated leading-edge capability and we are continually expanding this promising area to provide insight into patient experiences and to link activities to outcomes.

A key priority is linkage of the National Hospital Morbidity Database. More powerful linkage infrastructure is vital to a more patient-centred approach, so that issues relevant to the safety and quality of health care can be better examined. At the moment we know how many episodes there are in hospitals, but we don't know what this means for the people involved. Only with data linkage can we use the existing data to understand patterns of multiple admissions for patients, including unplanned re-admissions, and information on repeat periods of hospitalisation that are currently reported as separate episodes. Patient name information would be invaluable



Image © iStockphoto/Felix Mock

At the Institute we are particularly keen on enhancing data access, and capitalising on the new information environment—so keen that they are two of our five key strategic directions for the next three years!

for linkage with the National Death Index (for example, for 30-day mortality analyses) and other databases with names or name-based statistical linkage keys (SLKs).

The need for such linkage is increasingly recognised within states and territories, and this is an important strategic area for our national database as well.

The Institute has already made a significant investment in data linkage at the national level over a number of years. Some of the key outcomes include:

- the establishment and maintenance of the National Death Index for both internal purposes and the use of external researchers
- the development and initial implementation of the standard Community Services Statistical Linkage Key (CS SLK), which is being included in an increasing number of national data collections. The standard CS SLK was developed by the AIHW for use in the Home and Community Care National Minimum Data Set, but first implemented in the Commonwealth–State and Territory Disability Agreement National Minimum Data Set. In addition to these two collections, it is

currently in use in the Supported Accommodation Assistance Program (SAAP) collection, the Aged Care Assessment Program collection and the Juvenile Justice collection

- the development of the ‘event-based’ method of data linkage that allows linkage of hospital and residential aged care data
- linkage of data across several residential and community-based aged care programs (the hospital-to-residential-aged-care linkage demonstration project is now close to completion and is producing interesting and policy-relevant results)
- linkage of educational performance data with child protection data
- feasibility work on linkage across child protection, SAAP and juvenile justice collections
- internal person-based linkage within programs (for example, seven years of juvenile justice data are linked at the person level, allowing analysis of pathways in and out of that system). ■