



### Case Study

#### Australia's border hopping hospital hot spots

**Analysis of 44 million hospital records from QLD, NSW, SA and WA has found that more than 200,000 patients travelled interstate to receive treatment.**

New South Wales patients were the most likely to hop across state borders, into Queensland and South Australia.

The findings are helping improve national health service planning as well as proving the value of national data linkage programs and the benefits they offer to researchers. The researchers say that the research also has implications for the design of long term studies.

The research, supported by the Population Health Research Network, was published in the Medical Journal of Australia.

Using linked hospital discharge and death registration data the research team could identify where patients were most likely to receive hospital treatment away from their home state. ““We were surprised just how many people were moving interstate,” says Curtin University’s Katrina Spilsbury.

“We could only do this study across state boundaries because of the Population Health Research Network,” Katrina says. “The Network has led the way in bringing people and data together to understand what’s really happening in health in Australia

The results showed that 223,262 patients (3.0%) travelled across a state border to attend hospitals, with far northern and western New South Wales patients travelling to Queensland and South Australia hospitals, respectively.

A further 48,575 patients (0.6%) moved interstate between hospital visits, particularly to and from areas associated with major mining and tourism industries. Queensland hospitals had the highest proportions of hospital stays by people who had re-located, with most people coming from New South Wales. Western Australia received the lowest number of interstate patients.

Over 11,000 cross-border hospital transfers were also identified. These mostly occurred between smaller northern and western NSW hospitals to Brisbane and Adelaide hospitals.

Of patients who travelled across a state border to hospital, 2,824 (1.4%) died in that hospital. 496 patients died in one state within 30 days of leaving hospital in another state.

“This sort of data linkage gives us statistical power for studying cancer and rare diseases,” says Katrina. The process also provides policymakers, governments and health care providers with a more accurate and cost-effective use of existing data collections for evaluating patient outcomes and health care service use, particularly where patients and services are located near borders.

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Spilsbury K, Rosman D, Alan J, Boyd JH, Ferrante AM, Semmens JB. 2015. Cross border hospital use: analysis using data linkage across four Australian states. *Medical Journal of Australia* 202(11):582-6.

<https://www.mja.com.au/journal/2015/202/11/cross-border-hospital-use-analysis-using-data-linkage-across-four-australian>

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