### **Celebrating 15 years of PHRN**

Population Health Research Network

"The PHRN has revolutionised health and medical research by supporting nationwide coverage and access to data not previously available."

"Every jurisdiction now has at least ten years of core health data linked and many have other human services data too, while the demand for linked data keeps increasing." "PHRN started with one computer in a shared student room. Now, it's a national network that has raised significant funding from NCRIS and co-investments, impacting research on many levels."

"We spend so much time looking forward...It was wonderful to learn about pieces of work that have led to real policy and health change in Australia and internationally."

"We're so close to finalising the NMLK. It's the envy of other federated countries - they can't believe we link data across jurisdictions for researchers to access in a single secure environment."



Professor Francis Mitrou Head, Human Development & Community Wellbeing The Kids Research Institute Australia



Dr Merran Smith Chief Executive, PHRN



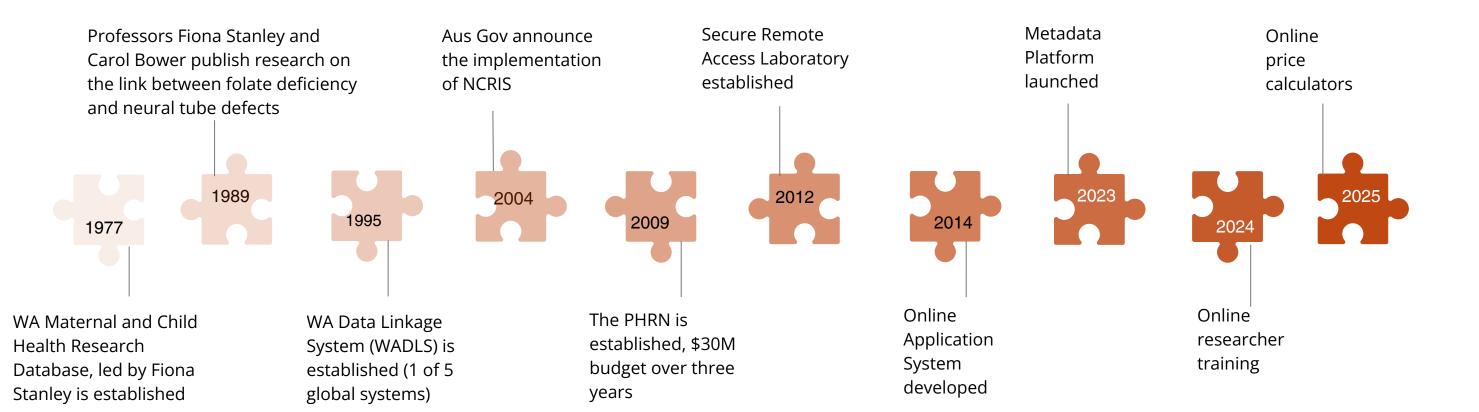
Professor Ian Smith Board Chair, PHRN



Professor Anna Nowak Dpt Vice-Chancellor (Research) The University of Western Australia



Dr Felicity Flack Senior Manager Strategy & Services, PHRN





Linking data today for a better tomorrow....20 billion records shared since 2019-20!

### Case study examples

Data linkage across sectors, jurisdictions and states provide a more holistic picture of each individual's health and wellbeing. Almost 3000 research publications have used PHRN-assisted linked data. The case studies below showcase real health interventions.

### HPV Vaccine reduces cervical cancer incidence

The Human papillomavirus (HPV) vaccine, introduced to Australia in 2007 helps prevent cervical cancer.

To monitor vaccine's effectiveness, vaccine registers were linked with cervical smear registers in QLD and VIC.

The data linkage informed government policy and a change in clinical practice, from cervical cancer screening every 2 years to more accurate HPV screening every 5 years.

Th new screening program is projected to be more accurate and cost effective. In 2013, the free school-based vaccination was extended to boys also.

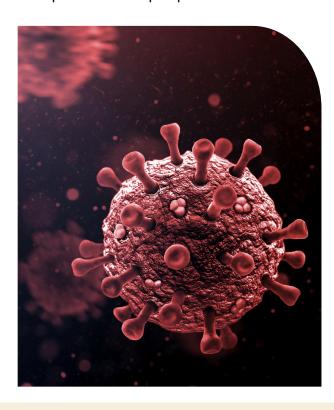


#### Fighting COVID-19

Lead researcher, A/Professor Sarah Thackway, Executive Director of epidemiology and evidence at NSW Health linked health information in real-time to track COVID-19 cases.

Data identifying COVID-19 cases in the health system was updated every two minutes.

Having this information meant they were able to report on COVID testing in particular communities, influence where COVID-19 pop-up testing clinics were located, and support contact tracing to keep vulnerable people in NSW safe.



## The risk of 'Mr Fluffy' home insulation

In the late 1960s to 1979, asbestos was used to insulate homes in ACT and southern NSW. Despite rectifications, years later, asbestos remained in many of the 'Mr Fluffy' homes.

Lead researcher, Professor Rosemary Korda, from the National Centre for Epidemiology and Population Health, linked data from residents who had lived in a 'Mr Fluffy' house in the ACT between 1983 and 2013 to the Australian Cancer Database and National Death Index.

The PHRN helped prove that men (but not women) who lived in a 'Mr Fluffy' house were 2.5 times more likely to develop mesothelioma compared to men who had not lived in a 'Mr Fluffy' house.

This vindicated government policy to take houses out of the residential helping stock.



# Australia's border-hopping hospital hot spots

Lead researcher, A/Professor Katrina Spilsbury, from Curtin University linked hospital discharge and death registration data from QLD, NSW, SA, and WA to identify where patients are more likely to receive hospital treatment away from their home state.

The study found more than 200,000 patients travelled interstate to receive treatment. Bringing together data for individuals across state boundaries would not have been possible without the PHRN.

Study outcomes helped improve national health and service planning and highlight states' responsibility for health service delivery.

