

**#55 -** An investment approach to human services in NSW: Optimising government investment using linked data

## **Presenting Author(s)\***

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## Objectives/aims

The Investment Approach to Human Services in NSW aims to prioritise whole-of-government human services funding to deliver evidence-based programs and services. It seeks to achieve measurable outcomes for vulnerable children and families in NSW and improve the productivity of human services using data driven insights. The aims of the approach are published in the NSW Government report: *The Investment Plan for Human Services in NSW 2023.* 

#### **Methods**

The investment approach uses a comprehensive cross-agency linked data asset, the NSW Human Services Data Set, comprising more than 60 NSW and Commonwealth datasets, to evaluate outcomes attributable to investments and compute savings to government as measured by change in liability and benefit realisation. NSW government, under the auspices of the Stronger Communities Actuary, has developed a method to estimate quantified savings to government as a result of social services investment, outlined in the *Forecasting Future Outcomes Report* 2022 released publicly in early 2023.

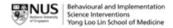
The investment approach uses actuarial modelling and analysis to determine effectiveness and return on investment. Once program funding (investment capital) is identified for a program (investment), five analysis steps occur sequentially using the Human Services Data Set:

- Stage 1. Identify cohort of people requiring targeted programs and services
- Stage 2. Design program using best available evidence
- Stage 3. Estimate ex-ante return-on-investment suing research literature and evaluation reports
- Stage 4. Implement program in NSW and measure realised outcomes attributable to programs including safety, health, education, justice and housing outcomes.











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Evaluation is conducted using propensity score matching and logistic regression. These methods have been independently validated by leading academics.

 Stage 5. Compute savings to liability and reinvest in effective programs and services.

The method developed can inform cost-benefit analyses by providing benefit measures for improved outcomes as well as the expected return-on-investment metric that compares avoided costs (savings to projected liability), extracted from the Forecasting Future Outcomes model, with the actual average cost (investment) of program delivery. This enables benchmarking of investment productivity.

# **Main findings**

NSW Government has developed a unique and rigorous approach to evaluating the comparative effectiveness of health and human services delivered across NSW using comprehensive linked data assets, comparative evaluation tools and actuarial modelling of return on investment. If implemented successfully, the Investment Approach to Human Services in NSW will prove a step change in the productivity of human services. The methods are able to be replicated by other government agencies in Australia to further build the evidence base of effective government programs and services. Specific findings regarding the effectiveness of individual programs are currently under embargo and will be presented at the Summit.