



## Special Commission of Inquiry into Healthcare Funding

**Submission Number:** 46  
**Name:** Sax Institute  
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## Introduction

The demands on the NSW health sector are complex and increasing.

The NSW Special Commission of Inquiry into Healthcare Funding provides a unique opportunity to recommend that the NSW Government prioritises the development of a learning health system in NSW where evidence is central to drive key investment and planning decisions across the health sector.

The need to strengthen methods of evidence use is not unique to NSW. The Global Commission on Evidence to Address Societal Challenges is a time-bound partnership of evidence organisations from around the world. It aims to produce recommendations and pursue 'pathways to influence' to strengthen the use of evidence by all decision-makers. The Global Commission on Evidence outlines eight, inter-related inputs into decision-making.



This submission builds on the work of the Global Commission and describes the value and the complexity of using evidence and the need for methods and approaches that increase the use of evidence in policy, planning and organisational reform.

In response to the Inquiry the Sax Institute proposes that the Commissioner considers an emphasis on expanding capacity in NSW for generating and applying evidence to strengthen decision making, resource allocation and health outcomes.

The Sax Institute is an independent Evidence Specialist – we help decision makers find and make the best use of evidence from research to solve real-world challenges. As an Evidence Specialist working with many research and health organisations, our unique skills help to create change. We form and sustain coalitions for change, knowing that meaningful action requires support from a range of agencies and individuals, each with their own perspectives, responsibilities and expertise.

The Sax Institute is widely recognised for its expertise in bridging the gap between research and policy and health services. Since its establishment 21 years ago, the Sax Institute has developed a range of capabilities to fill evidence gaps, formed a large membership network that collaborates on the production of evidence across most major topics in health, and set up infrastructure and systems that enable organisations to identify, access and mobilise evidence.

At the Sax Institute we understand that solutions to improving health and wellbeing:

- Are likely to be complex, requiring a systems approach
- Will often require action by many different players
- Will often be incremental over many years, with sustained effort necessary over that time
- Require many different skills and approaches.

The Sax Institute has the necessary expertise to address the many different barriers to using evidence in policy, practice and service delivery. We draw on expertise nationally to analyse health decision challenges; undertake evaluations and reviews; interrogate data to inform decisions; and facilitate and drive collaboration to address priority health challenges.

# Response to the Terms of Reference

## Governance and accountability structure of NSW Health

The current governance and accountability structures in NSW are multifaceted and tasked with a wide variety of competing priorities and interests. To tackle key reform priorities, requires the formation of more agile driven collaborations with explicit mandates to drive improved outcomes through an evidence-based approach.

The best use of evidence in policy, programs and services will usually require action over an extended period and the involvement of many different organisations and actors. Activities taken by different organisations are often uncoordinated unless specific attention is paid to ensuring alignment and cohesion. Supporting organisations to form networks and work collaboratively in a coordinated way with shared goals and ambitions can improve the efficiency and effectiveness of the health system whilst reducing duplication of effort and wasting limited resources.

The Sax Institute coordinates large-scale, long-term collaborations which facilitate change. The Institute has administered **The Australian Prevention Partnership Centre** since its inception in 2013. The Prevention Centre is a national collaboration of researchers, policy makers and practitioners who identify new ways of understanding of what works to prevent lifestyle related chronic health problems and provides economies of scale whilst eliminating duplication of research effort. By collaborating with an increasing number of investigators and agency partners, the Prevention Centre has developed engagement across research discovery, synthesis, communication and action. The collaboration includes 36 agencies across all states and territories and 200 individuals from 22 research institutions and practice settings.

**The Sax Institute proposes the establishment of investment in specific coalitions and partnerships between organisations to address key health policy challenges, reducing duplication, creating greater opportunity for collaboration, and achieving better value for public money.**

## New models of care

And technical and clinical innovations to improve health outcomes.

Evidence could be more widely utilised to support the introduction of new innovations and evidence emerging from research. There are a range of barriers that can exist for governments in accessing relevant research and evidence that supports innovation. Often the demands of government decision-making and community expectations outpace the collation and transfer of evidence, and this may also impinge its use. Research evidence is not always pragmatic in its ability to be implemented at scale or relevant to the ways in which services are delivered in NSW. Importantly, NSW Health generates its own evidence through data analytics, performance management and rigorous evaluations of interventions.

To ensure that evidence is accessible, useful and relevant requires specialist capabilities and skills. Of significant value are evidence support services that operate alongside health decision makers and enable evidence generation, knowledge translation and capability building.

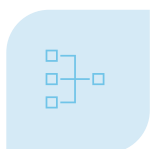


### Evidence informed approach to policy and planning



#### **Intermediary function**

Knowledge brokerage function acts as a bridge between evidence and real world application, plotting a path forward for decision makers and connecting them to the right kind of evidence support services.



#### **Systematic approach**

Led by experienced health advisors, it offers a structured method for decisionmaking.



#### **Specific issue focus**

Aims to clarify the key targets of an intervention or policy area, and informed by evidence, recommends the most effective means of designing an intervention and measuring its effect.



#### **Enhanced decision-making**

Benefits include evidence informed interventions and services, actionable strategies and policies, and improved outcomes.

The Sax Institute has transformed the capacity of decision makers to rapidly find and interpret the best available evidence in partnership with policy makers and health service leaders. We pioneered the concept of engaging individuals with health policy research and health services research skills as ‘knowledge brokers’ to help health decision makers define the evidence that they need. By June 2023 the Sax Institute, using knowledge brokers, had

produced more than 500 reviews and reports for health decision makers, including more than 350 rapid evidence reviews that been influential in policy analysis and policy outcomes. Reviews of the evidence can be timely and efficient and where effective involve a rapid search and synthesis of the most relevant and credible evidence on problems identified. Evidence can be drawn from peer-reviewed research and government and other sources. Typically, effective reports and reviews of evidence are solutions-focused, ideal for informing the development or revision of policies or programs, supporting funding decisions, and revealing gaps in current knowledge. As accessible summaries, they can also support communications of evidence to other stakeholders. The effective conduct of reviews of evidence typically requires specialist skills and techniques (see *Evidence Connect* on pg. 10)

**The Sax Institute proposes that methods of ongoing engagement with current and emerging evidence are integrated into the development of new models of care and innovations across the NSW health sector.**

## **The way NSW Health funds health services**

Funding decisions in health are often complex and influenced by multiple, interacting factors with potential solutions competing for attention.

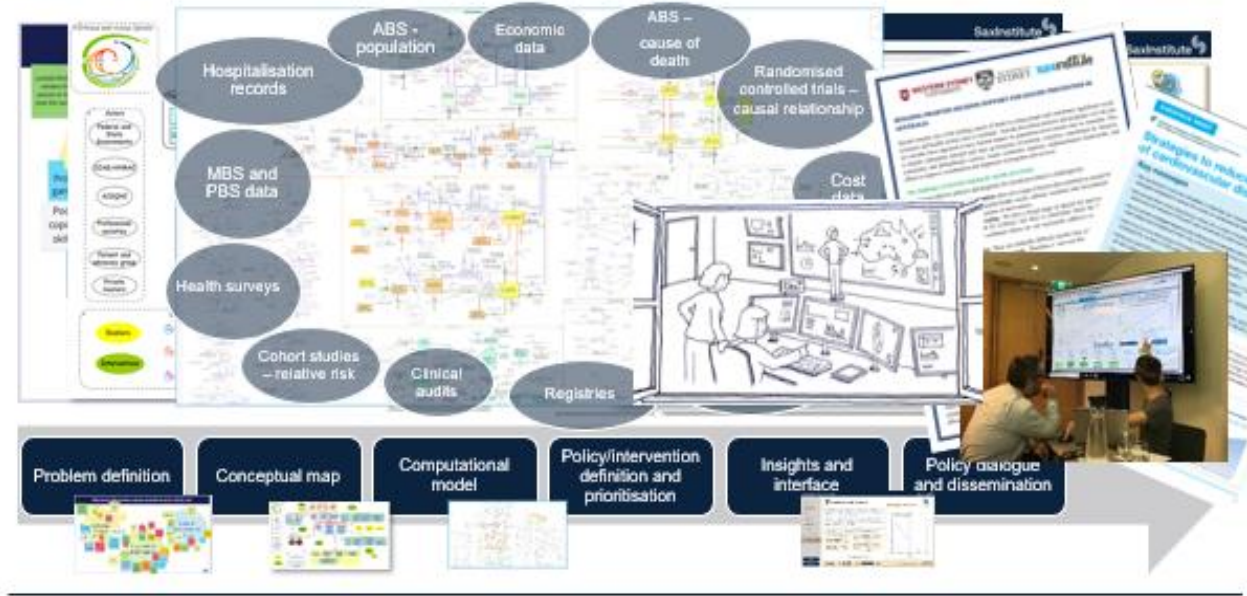
Well-developed decision support tools can be critical to accurately forecasting the impact of funding options, allowing decision makers to examine the effect of combining specific combinations of options in diverse ways. The most effective tools apply a participatory approach to provide better transparency of models and their assumptions, and draw on evidence, data, and real-world knowledge and to build robust and accessible tools.

The Sax Institute develops simulation tools that to allow decision makers to test scenarios and strategies and to anticipate the intended and unintended consequences of their decisions. Our tools span a wide range of health challenges including childhood obesity, mental health services, smoking reduction, and mitigating the impact of COVID-19 on our hospitals.

In developing these tools we have worked with health system partners including the NSW Ministry of Health, NSW Agency for Clinical Innovation, the Tasmanian Department of Health, NSW Mental Health Commission, Queensland Health, and Primary Health Networks. (See Decision Analytics on pg. 11)



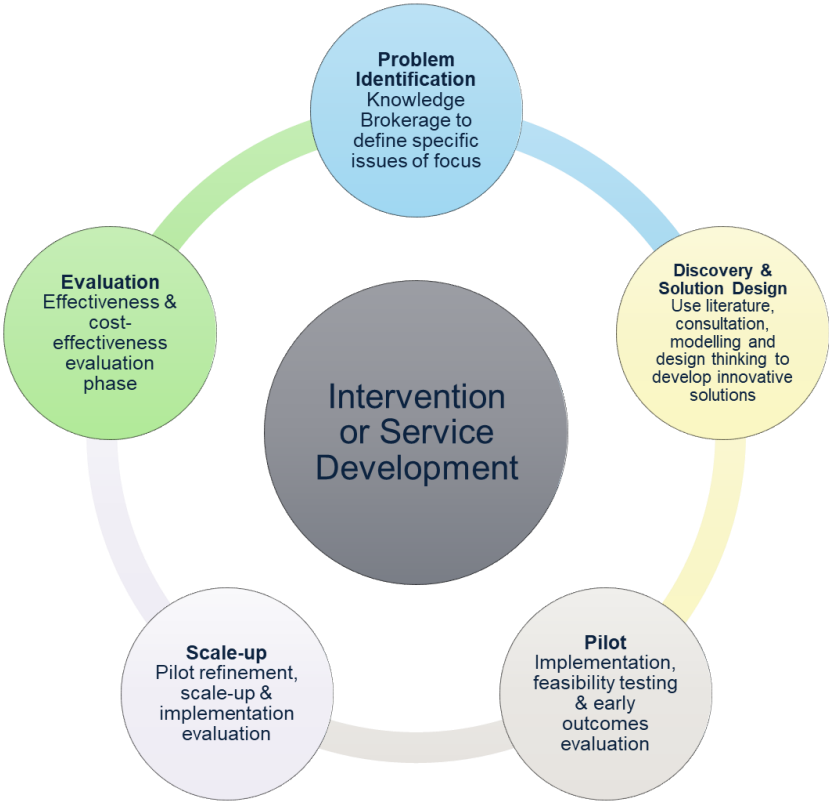
## Participatory model development



The Sax Institute proposes the increased investment in and use of decision support tools to better enable policy makers to draw on evidence, data, and real-world knowledge to understand the intended and unintended consequences of funding decisions.

Rigorous evaluations of health services and interventions is a critical component of an effective learning health system. This approach ensures an evidence-informed approach to decision making and measuring the impact of programs to ensure optimal health outcomes in a cost-effective way.

A key element in evaluation is the importance of engaging communities in identifying needs, considering the evidence, and developing and testing local, workable solutions.



**The Sax Institute proposes increased investment in the evaluation of co-designed solutions to complex health problems to measure the cost-effectiveness and cost-benefit of programs, services and policies.**



# Appendix:

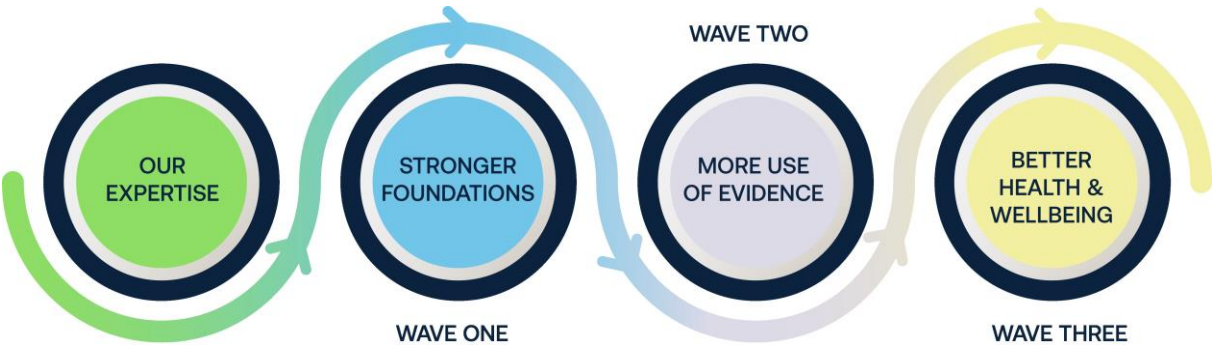
## The Sax Institute

The Sax Institute has unique skills and assets help to create change. We form and sustain coalitions for change, knowing that meaningful action requires support from a range of agencies and individuals, each with their own perspectives, responsibilities and expertise.

We work directly and indirectly right across the research-to-policy continuum to increase the use of evidence in analysing, evaluating and forming policy and programs.

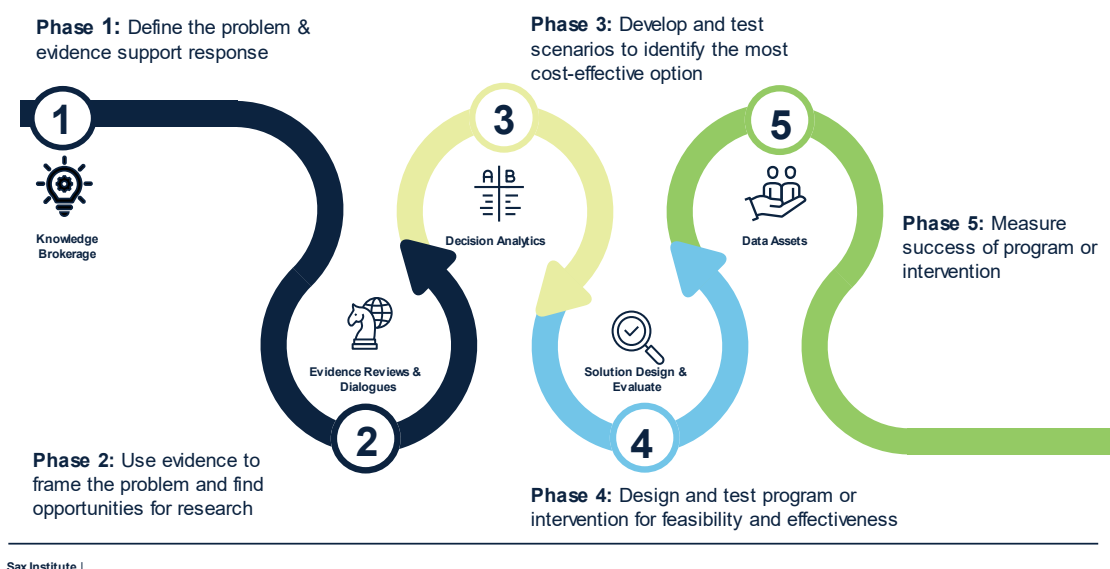
Our work has impact across three key stages in building and enabling:

1. Stronger foundations (wave one impact), including the development of new concepts and methods; improved evidence for policy; greater capacity; and stronger partnerships.
2. Greater use of evidence in policy (wave two impact).
3. Better health and wellbeing (wave three impact), which is realised in the longer term and involves many actors.



### Evidence Mobilisation

The Sax Institute’s Evidence Mobilisation program involves the rapid search and synthesis of the most relevant and credible evidence on key health challenges. The diagram below demonstrates the Sax approach.



The evidence is drawn from peer-reviewed research and government and other sources. The Sax Institute Evidence Check reports are solutions-focused, ideal for informing the development or revision of policies or programs, supporting funding decisions, and revealing gaps in current knowledge. As accessible summaries, they can also support communications of evidence to other stakeholders. Below is an example of how an Evidence Check was successfully used to identify strategies to reduce solar ultraviolet radiation in playgrounds.

*An Evidence Check approach was used in 2023 to investigate the best ways of increasing shade in school playgroups to reduce solar ultraviolet radiation by up to 75%. Six types of strategies were identified: having explicit policies, guidelines and recommendations, carrying out site audits and site plans, developing city level tree and shade site masterplans, creating monetary incentives, creating targets and other metrics and using multi component interventions.*



## Evidence Mobilisation approach

	Evidence Checks	Impact Labs	Consultancy
<b>What</b>	Rapid evidence review	Dialogue event (by invitation)	Project
<b>How</b>	Brokering model, + access to independent content experts (peer review quality)	Multistakeholder coproduction space, facilitated, interactive, deep	commissioned/collaborative works (mobilise range of Sax Skills/ expertise)
<b>Why</b>	<b>Independent Current Summaries</b> Credible evidences, gaps/ emerging recommendations, support stakeholder comms e.g., snapshot>>> systematic	<b>Test ideas, questions, solutions</b> Connect research, practice, policy (and other evidence end users) to work together on “wicked problems”	<b>Generate new knowledge</b> Bespoke: typically impact orientated, strategic investment, e.g. method innovations, service evaluation, strategy development
<b>Time</b>	3 weeks (brief) to 3+ months	3 -6+ months	Negotiable, typically 12 months+

### Evaluate

The Sax Institute’s Evaluate Program collaborates with decision makers to prepare for and conduct independent evaluation of policy and programs using a range of evaluation methodologies.

A current Evaluate initiative (below) aims to understand the impact and assess the value for money of an innovative primary care workforce model.

*Four small NSW towns were unable to sustain independent primary care services. To enable primary care services to meet the needs of the community, the four towns pooled their resources and established small medical centres adjacent to local multipurpose health services and engaged medical, nursing and support staff through a single employer model. This was achieved with input from local communities to understand the needs of local people. The findings of this project will provide robust evidence of the impact and value for money of this type of model. Many regional areas of NSW (and Australia) are experiencing similar challenges in primary care.*

### Decision Analytics

The Sax Institute’s Decision Analytics Program develops simulation-based tools to support decision making across the health system. These tools support our health system partners to determine optimal outcomes and the most effective use of resources by allowing them to test scenarios and strategies, and to anticipate the intended and unintended consequences of

their decisions. Our tools span a wide range of health challenges including, childhood obesity, mental health services, smoking reduction, and mitigating the impact of COVID-19 on our hospitals. We have worked with health system partners including the NSW Ministry of Health, NSW Agency for Clinical Innovation, the Tasmanian Department of Health, NSW Mental Health Commission, Queensland Health, and Primary Health Networks.

*In 2022, the Sax Institute developed a sophisticated modelling tool in partnership with the NSW Health Agency for Clinical Innovation to help prepare NSW Health for future surges of COVID-19 patients. The tool simulates the movement of patients through 25 different hospitals in NSW. It was built over eight months, with our team integrating a large amount of data from hospitals and consultations with clinicians and hospital managers into the tool.*

*When a hospital experiences a surge of patients with COVID-19, the impacts are felt not just in the emergency department and intensive care unit, but across the entire hospital. This tool enabled decision makers in the hospital to visualise the impact on the entire hospital, and to test a range of scenarios to mitigate the impact such as reducing or outsourcing elective surgeries or increasing the hospital beds available to patients leaving the emergency department.*



## What we do



Analyse health decision challenges and identify where evidence could contribute



Build shared data systems for fast, high-quality and relevant data



Interrogate data and undertake evaluations



Review, investigate and communicate the implications of research



Build skills in working between the worlds of research and policy



Develop and sustain alliances and collaborations. (over 70 research members)

## Key Sax Institute Research Assets

The '**45 and Up' Study** is a cohort study which enrolled more than 267,000 NSW residents aged 45 and over from 2007. The 45 and Up Study database is available to all Australian researchers who meet institutional criteria and fulfil ethics requirements, and to date it has been used by 877 researchers and generated 550 publications. The Study provides a ready vehicle for examining the consequences of ageing, the progression of health conditions, and the impact of interventions. Multiple sub-studies have been undertaken using the 45 and Up Study data. Below is an example of how data from the 45 and Up Study was used by Cancer Australia.

*Using data on 1,200 participants who did not have lung cancer, researchers were able to validate a lung cancer screening tool that had been widely referenced in international screening guidelines and recommended by Cancer Australia for use in a proposed lung cancer screening program. Lung cancer screening is currently planned for introduction with individuals who are at higher risk. The 45 and Up Study cohort surveys are undertaken every five years, and rapid surveys can be mounted if needed, as was done during the COVID-19 pandemic. The regular surveys allow for additional variables to be inserted in survey forms so that emerging issues can be examined.*

The **Secure Unified Research Environment (SURE)** is an electronic environment in which confidential datasets (including the 45 and Up database) can be stored and analysed, and in which two or more databases can be linked to expand the range of variables of each database.

While SURE is not in itself unique, there is only a small number of secure repositories in Australia, however SURE, is the only one in which researchers can undertake linkage projects involving the Medical Benefits Schedule (MBS) and Pharmaceutical Benefits Schedule (PBS) databases.

### Acknowledgement of Country:

The Sax Institute acknowledges the Gadigal People of the Eora nation as the first peoples and traditional owners of the land on which the Sax Institute office is located. We pay our respects to Aboriginal Elders past, present and emerging. We recognise the strong cultural connections of all First Peoples to their land and water across Australia.