

Special Commission of Inquiry into Healthcare Funding

Submission by the University of Technology Sydney

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Introduction

Thank you for the opportunity to contribute to the Special Commission of Inquiry into Healthcare Funding. The University of Technology Sydney (UTS) supports the NSW Government's review of healthcare funding in NSW to identify opportunities to deliver higher quality, timelier, and more accessible patient-centred care.

UTS believes that a well-designed and used healthcare funding system offers information that helps clinicians and health care professionals to make better healthcare resourcing decisions, ultimately delivering better care for all.

The primary purpose of this submission is to introduce the Special Commission to the expertise and advice offered by our health and economics experts, and our experts would welcome an invitation to appear before the Special Commission. The secondary purpose of this submission is to briefly respond to a select number of the Inquiry's Terms of Reference. Given the complexity of the subject matter and the broad ranging scope of the Inquiry, we also provide a short list of relevant reports for the Special Commission's consideration at the end of this submission.

Recommendations

UTS's broad recommendations include:

- Targeted funding reform and strategic investment by government should be guided by high-quality costing data for the delivery of timely, equitable and quality healthcare to the people of NSW.
- A review of the existing model for clinical placements in NSW.
- Encouraging and supporting a culture of lifelong learning in healthcare by promoting greater collaboration between the health and education sectors.

About the University of Technology Sydney

UTS is the top-ranked young university in Australia. Our strategy is to be a leading public university of technology recognised for our global impact. As a university of technology, it is our role to ensure our graduates shape the future professions and businesses that will be needed in Australia and overseas. Since our inception, an integral building block of our success has been our outward, global focus and ability to partner with industry. Our campus has no walls; it is deliberately designed to be porous and support connections, knowledge exchange and collaboration. This embodies our approach to engagement and permeates our teaching and research. Our student body is diverse, and we encourage our students and staff to look at the world from different perspectives.

As a trusted provider of advice, services and technologies to the health sector, UTS has a reputation for being on the cutting edge of health and biomedical innovation. Our world-class health expertise spans a comprehensive range of areas with no less than eighteen research centres, institutes and groups that focus on delivering real-world solutions. The most relevant of these for current purposes are PATH, CHERE and INSIGHT as described below.

UTS Business School – Performance Analysis for Transformation in Healthcare Group (PATH)

Established in 2015, the PATH Group is located within the UTS Business School and is committed to working collaboratively with partners in the healthcare industry, including the Independent Hospital Pricing Authority (IHACPA) and NSW Health, to provide high-quality, evidence-based analysis and support. Led by Professors [Prabhu Sivabalan](#) and [David Bedford](#), the multidisciplinary team is comprised of academic and industry experts with significant experience in the analysis of costing and resourcing practices.

Recent projects of relevance include the following and are available on request to the Special Commission:

- *Patient level costing in Australia – Uses, challenges, and future opportunities* (2021) prepared for IHACPA. In interviews with over 100 stakeholders, the purpose of this report was to examine the perceptions of patient level costing data by key stakeholders in local health networks.

- *Surveying the patient costing landscape* (2020) prepared for NSW Health. This survey was devoted to understanding the extent to which high-quality cost information was been used in decision-making in NSW Health and its constituent Local Health Districts and Speciality Health Networks.

Centre for Health Economics Research and Evaluation ([CHERE](#))

Established in 1991, CHERE is a national and international leader in health economics, health services and health policy research located within the Faculty of Health at UTS. CHERE's research aims to enhance performance and to improve health outcomes and value for money within the health system. CHERE has extensive experience in evaluating health services, programs and technologies, in analysing the drivers of health system behaviour and performance, and in assessing the effectiveness of policy initiatives. Led by Professor [Rosalie Viney](#), CHERE's research draws on the expertise of its members in the development of cutting-edge methods in health economics, health econometrics, economic evaluation, health technology assessment and discrete choice experiments.

Research Institute for Innovative Solutions for Well-being and Health ([INSIGHT](#))

Launched in 2023, INSIGHT is led by Professor [Susan Morton](#) and provides a convening space to foster collaborations across the university and between communities, researchers and decision makers to support the establishment of multi-disciplinary research programs that focus on improving population health and well-being outcomes. Priority projects cover the health and well-being of Aboriginal and Torres Strait Islander peoples, as well as women and children's health across the life course and the wellbeing of those in older age and those living with chronic and life-limiting conditions.

Given the reputation and expertise of PATH, CHERE and INSIGHT, UTS is well positioned to provide advice and data to the Special Commission regarding healthcare funding in NSW and our experts would welcome an invitation to appear and provide evidence.

Responses to the Terms of Reference

For the convenience of the Special Commission, this submission maintains the alphabetical order of the Inquiry's Terms of Reference in structuring our response to those areas within our areas of expertise.

Term of Reference A

The funding of health services provided in NSW and how the funding can most effectively support the safe delivery of high quality, timely, equitable and accessible patient-centred care and health services to the people of NSW, now and into the future.

Healthcare funding in NSW Health often comes from various sources, including state funding models, grants, and federal programs. Each of these sources have different requirements, rules, and priorities. Failure to understand these differences can lead to inefficient resource allocation and adversely impact the quality of healthcare service delivery.

Costing information is integral for healthcare funding as it allows for efficient resource allocation, aids in budget planning and forecasting, promotes cost efficiency, enables comparative analysis for benchmarking, supports the assessment of potential impact, enhances transparency and accountability, facilitates evidence-based decision-making, and drives quality improvement efforts in the healthcare sector. The PATH Group's research identifies that strategic investment guided by high-quality costing data is indispensable for delivering timely, equitable and quality healthcare to the people of NSW.

Most of the state funding is based on weighted average units (WAU). This is based on the average cost of providing services in particular health streams (e.g., acute, subacute, non-admitted), which is then weighted by a factor according to the type of medical treatment being provided (e.g. taking into account the complexity of treatment and length of stay) and adjusted based on patient and hospital level factors. While this funding model is advanced by international standards, there are still considerable concerns as to its effectiveness in incentivising value-based health outcomes.

Research by the PATH Group suggests that there are several issues that need to be addressed in the costing processes of NSW Health to drive the development of better value-based funding models.

First, there needs to be greater standardisation of costing practices across local health districts. The variations in how costing is done mean that the quality of input into funding models is jeopardised. It also significantly limits the potential for facilities and districts to benchmark services against State best practice. Second, stakeholders report that the most significant concern with current costing data is timeliness. Cost data is reported from LHDs to NSW Health quarterly, while activity data is reported monthly. Increasing cost data collection and reporting to a monthly basis allows for the matching of activity and cost reporting, offering updated data for decision makers to engage with. This will significantly improve the ability for cost data to inform operational and strategic decision-making. Finally, there are substantive technical challenges in combining cost, service quality and other data to make informed decisions about value from health service delivery. Significant investment into IT resources and software is necessary to be able to provide decision-makers with timely data about the efficiency and effectiveness of service delivery and outcomes.

State health jurisdictions such as NSW Health also absorb many areas of care that may not relate directly to public hospitals, for example Commonwealth funded primary health, aged care and disability services. For example, in rural jurisdictions, many public hospitals devote spaces and staffing to care for the elderly or individuals with disability, who have no access to Commonwealth services in this space. Many are resultingly cared for in public hospital spaces when they have no disease or ailment other than their advanced age or disability. This is a right and humane response for public hospitals to engage in but obfuscates the true cost of resourcing these services by the Commonwealth. It also creates additional state costs that should instead be absorbed by the Commonwealth. Our ability to better capture the true extent of resources devoted to these types of care and make a case for alternative ageing, disability or primary care services is critical to better freeing public hospital resources and possibly reducing wait times for current patients awaiting public hospital healthcare.

Term of Reference C

The way NSW Health funds health services delivered in public hospitals and community settings, and the extent to which this allocation of resources supports or obstructs access to preventative and community health initiatives and overall optimal health outcomes for all people across NSW.

Public hospitals across Australia, including in NSW, are activity-based in their funding model. This means that hospitals are funded for the number and type of 'activities' they provide for each hospital admission. Through this funding mechanism hospitals with a higher number of activities, and those providing more complex activities, receive higher funding amounts. In contrast, the relatively narrow range of community services health services currently delivered by NSW Health (e.g. mental health, alcohol and drug services, cancer screening and immunisation programs) are funded through a patchwork of block funding from the state government and Medicare fee-for-service, depending on the service.

This means that national funding arrangements do not incentivise NSW Health to expand its provision of preventative and community health initiatives, or to optimise health outcomes for the NSW population. By basing funding upon activities, hospitals are incentivised to focus on volume, efficiency and type of activities not the health outcomes produced. Funding is provided to the hospital regardless of whether patients obtained a good outcome or not.

Using maternal health care as an example, if a woman gave birth and was discharged early without receiving breastfeeding advice; then later presents to the emergency department with mastitis, was treated and then sent home; and then re-presented to the emergency department and was later admitted for an infection stemming from mastitis; the hospital would receive funding for all four episodes of care. All of the subsequent readmissions could have potentially been prevented with the provision of breastfeeding advice but it was not part of this scenario because it is a form of preventative health care.

Preventive health initiatives seek to reduce long-term contact with the health system as people are in a state of good health. From a social perspective, they require an initial investment of resources, that will later likely see cost-saving by reducing the need to use resources in the future to treat or manage health conditions. Under activity-based funding (as well as Medicare fee-for-service), hospitals may be funded for preventive services if they fall within an existing funded activity, but they do not receive any financial benefit (i.e. a payment for outcomes) from preventing people from accessing health care in the future.

As such, there is an opportunity to reconsider how preventive health care is funded with the objective of improving access to services. For example, health outcomes could be improved by introducing midwives into the primary care space (e.g. introduce community birthing centers run by midwives), or nurse practitioners into community health, rural and remote areas to reduce the need for GP and hospital access.

It is important to recognise that population-level prevention efforts are fundamental to reducing demands on hospitals and improving overall health outcomes. The current approach to funding health services in NSW is heavily weighted towards hospitals, with limited investment in preventative and community-based care. Our research highlights that current funding models emphasise hospital-centric care over preventative and community-based services.

In summary, several activities and practices obstruct the optimal and effective use of resources in the NSW healthcare system, including:

- Siloed funding models that dedicate resources based on hospital, department or service line without alignment to patient outcomes and system objectives. This promotes narrow focus on cost reduction of existing services rather than wider health system goals.
- Healthcare funding often originates from various sources, including state funding models, grants, and federal programs. Each source has distinct requirements, priorities, and objectives, creating a complex landscape. The challenge lies in harmonising the diverse funding mechanisms to ensure they work together seamlessly.
- Fee-for-service payment models that reward volume over value, driving overservicing and unnecessary care.
- Disparate costing systems and data fragmentation, creating reporting burdens and difficulty in comparing relevant data on service effectiveness and efficiency.
- Failure to incentivise coordination across sectors and transitions of care. This leads to duplication and gaps in care.
- Lack of transparency on regional cost variations and clinical practice patterns.

Targeted reforms to funding mechanisms, expanded patient-level cost data scope and reporting, integrated information systems, and increased transparency can help redirect activities towards more optimal use of scarce healthcare resources. For instance, current funding models need to adequately incentivise coordination between hospital and community providers. Transitioning to bundled payments encompassing both inpatient and outpatient costs could encourage integration, but this requires investment into IT, software, and costing processes.

Term of Reference D

Strategies available to NSW Health to address escalating costs, limit wastage, minimise overservicing and identify gaps or areas of improvement in financial management and proposed recommendations to enhance accountability and efficiency.

Strategies available to NSW Health to address escalating costs, limit wastage, minimise overservicing and identify gaps or areas of improvement in financial management include from a funding and costing perspective:

- Achieving alignment between state, federal, and grant funding requires careful consideration and coordination. Coordinating these funding sources is essential to avoid duplications, inefficiencies, and disparities in healthcare access.
- Expanding patient level costing data (PLCD) to provide more granular insights into the cost drivers and resource usage patterns associated with different services. This includes collecting more detailed data on staffing, equipment utilisation, operating rooms, beds and other resources, which can identify under utilised capacity. Costing techniques such as time-driven activity-based costing have been shown to be particularly effective in driving value-based decision-making, but so far have very limited application in Australian healthcare.
- Increasing standardisation of costing practices to enable robust benchmarking across LHDs and reveal unwarranted variation.
- Transitioning provider payment models away from fee-for-service to disincentivise overservicing. PLCD is critical to developing cost-effective bundled payments.
- Capability building for staff in applying PLCD insights through training and skills audits. This empowers evidence-based decision-making.
- Enhancing transparency and collaboration on procurement contracts and sharing of consumables cost data across LHDs. This allows more strategic purchasing and contracting.

Term of Reference F

The current capacity and capability of the NSW Health workforce to meet the current needs of patients and staff, and its sustainability to meet future demands and deliver efficient, equitable and effective health services.

UTS is developing and supporting the health workforce of the future, through practical, relevant and research driven education in nursing, midwifery, health science, sport and exercise and a broad range of postgraduate health disciplines.

For example, UTS Pharmacy is currently reviewing an Extended Scope of Practice Master degree to meet community pharmacy needs and the Faculty of Health is looking at opportunities for dual degrees in nursing / paramedics particularly where this supports career pathways for both nurses and midwives in child and family health care. Elsewhere, UTS is collaborating with North Sydney Local Health District to develop a strategy for evaluating financial and non-financial factors impacting on the retention and attraction of staff (TOR F.iii). For too long, our research has found that too many newly qualified graduates in clinical psychology and physiotherapy go straight into private practice and too many mid-career clinicians also leave the health service prematurely. Another opportunity is to increase the number of nurse practitioners who can work in their own right without an attachment to a General Practitioner to relieve the workload of a practice.

Term of Reference G

Current education and training programs for specialist clinicians and their sustainability to meet future needs.

Australia's health system is founded on a quality workforce of skilled, capable health professionals. A majority of these are educated in Australian universities, such as UTS. In response to this specific Term of Reference, UTS focusses on the challenges to clinical placements and opportunities for education and training more broadly.

At UTS, clinical placements are an integral component to health students' education and universities must ensure students complete these prior to graduation. For example, in 2022 UTS's Faculty of Health found 12,000 student placements across 3,263 sites relating to 12 discipline areas. This is no small logistical exercise.

Our ability to meet Australia's health workforce needs is constrained by a wide range of challenges, including the fact that educational institutions must compete with each other for access to placements for our students. From the student perspective, the greatest barrier is cost of living pressures. Clinical placements are compulsory, unpaid and exacerbate any existing financial stress experienced by students. Induced placement poverty is a reality faced by many students and directly disadvantages students from underrepresented equity groups by putting at risk the completion of their degrees and achieving their career goals. The existing model, as described here, is unsustainable and undermines our efforts to meet Australia's health workforce needs.

UTS recommends a review of the existing model for clinical placements. Such a review could consider:

- A review of the financial study support available to students to enable better access to clinical placements. Such a support scheme could assist students by providing a stipend while on placement; a rental subsidy and/or free public transport for students travelling to placements.
- Identifying and eliminating excessive bureaucratic barriers that prevent the expansion of placement opportunities in new / various clinical settings. For example, placements in settings other than hospitals such as home-based care to provide real world experiences noting that hospital placements may reduce over time as a consequence. If accepted, educational providers will need to be correspondingly agile in response.
- How to promote a healthcare culture that supports education and the mentorship and supervision of students and keep up to date with latest research evidence and technologies to optimise both patient care and the student experience.
- How to support and resource placements in rural areas to boost the rural workforce.
- How to encourage accrediting bodies to develop new ways of working and measuring student success (learning outcomes etc.), not merely by number of clinical hours. Current practices are outdated and limit innovation.

Regarding current education and training, there are several opportunities to improve how these are offered and maintained through a health care professional's lifetime of learning. Broadly, a culture of lifelong learning in healthcare should be encouraged and supported. For example, there is significant evidence that enhanced digital and data literacy (including training in the use of AI tools) empowers evidence-based decision making at all levels and areas. Promoting greater collaboration between the health and education sectors is the best way to achieve this and should include:

- Jointly developing a skills matrix and facilitating the exchange of knowledge to support the ongoing alignment of future health care needs to ensure that staff have access to the necessary education and training. This could also include sharing best practice with respect to cultural capability, staff retention / attraction strategies and innovative ways of working.
- Taking a patient-centred, outcomes focussed approach by shifting away from metrics that narrowly define success by volume of activity. For example, increasing the focus on public health, health promotion and prevention (community health literacy) rather than disease management.
- Introducing flexibility in the scope of practice of some health professionals to meet emerging needs, for example Nurse Practitioners.
- Acknowledging and addressing inequity of access with respect to education and training opportunities.

Other initiatives to support education and training include:

- Appointing clinical business partners in local health districts and major facilities. This may improve better engagement in finance, managerial and clinical teams in driving better value across healthcare provision and fostering shared accountability.
- Considering more flexible employment contracts for example, include in-hospital time combined with telehealth opportunities for those who desire it.

Contact information

UTS appreciates the opportunity to contribute and would welcome an invitation to appear before the Special Commission. Please do not hesitate to contact Professor Debra Anderson, Dean of the Faculty of Health at the University of Technology Sydney (Debra.Anderson@uts.edu.au) should you wish to discuss this submission further.

References

- Patient level costing in Australia – Uses, challenges, and future opportunities. 2021. Report prepared for IHACPA and available from here: https://www.ihacpa.gov.au/sites/default/files/2022-08/patient_level_costing_in_australia_-_uses_challenges_and_future_opportunities.pdf
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- Paying for value: options for payment reform in Australia (2022). Wise S, Hall J, Haywood P, Khana N, Hossain L and van Gool K, Australian Health Review, 46(2), 129-133, 10.1071/AH21115
- North Queensland Community Pharmacy Scope of Practice Pilot (2022). Prepared for Queensland Health and available upon request.
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