New South Wales

Special Commission of Inquiry into Healthcare Funding

Submission Number: 28

Name: Adjunct Professor K Eagar, UNSW School of Clinical Medicine

Date Received: 20/10/2023

Professor Kathy Eagar
Adjunct Professor
School of Clinical Medicine
Faculty of Medicine and Health
University of New South Wales
October 2023

NSW Health Funding Inquiry 2023

Introduction

Thank you for the opportunity to provide a submission to the NSW Health Funding Inquiry. This introduction summarises my professional and academic background. The following sections then address key issues that the inquiry is considering.

I am Adjunct Professor of Health Services Research at the University of New South Wales and at the Queensland University of Technology. I am also the Director of my own private consulting, evaluation and advisory company.

I was the inaugural Professor of Health Services Research and Foundation Director of the Australian Health Services Research Institute (AHSRI) at the University of Wollongong, positions I held from 1997 until my retirement from the University of Wollongong at the beginning of 2023.

I have authored over 600 articles, papers and reports on wide-ranging health service and health system issues including health care management, health outcomes, information systems and funding of the Australia and New Zealand health and community care systems. I am internationally recognised in particular for my work in casemix classification development, funding system design, patient reported outcome measurement and value-based heath care. I am well known for my cutting edge work in palliative care, rehabilitation, mental health and aged care.

I have led casemix classification and funding system design programs in Australia and internationally since the early 1990s. I developed the Australian National Subacute and Non-Acute Patient (AN-SNAP) classification which is now the Australian national standard for palliative care, rehabilitation, geriatric evaluation and management, pychogeriatric and maintenance and supportive care in Australia. I also developed the Australian National Aged Care Classification (AN-ACC), which was adopted as the Australian standard in 2022. I previously developed Australian Refined Diagnosis Related Groups Version 7.0 and have also undertaken casemix classification development in Australia and internationally in mental health, palliative care, ambulatory care and post school support programs for students with disabilities. I am currently developing a new ambulatory care casemix classification for the Kingdom of Saudi Arabia.

I was on the Board of the Illawarra Shoalhaven Local Health District for ten years until 2021. Prior to that, I was on the NSW Resource Distribution Formula Committee for many years and had a key role in the introduction of casemix (Activity based Funding or ABF) in NSW and nationally.

I have a strong record of achievement in undertaking policy-relevant health services research in partnership with the health system and have a well-established and demonstrated track record in research translation. Based on my extensive experience in the health sector and health services research, I am regularly called upon by governments nationally and internationally to consult on the planning, and delivery of health services, and provides high level policy advice to all levels of government in several fields, for example health and community care funding and classification systems, health care quality and outcomes measurement, mental health, palliative care, aged care and rehabilitation services.

The balance between central oversight and locally devolved decision making (including the current operating model of Local Health Districts)

The NSW health system has gone through cyclic waves of centralisation and decentralisation over the last 40 years. Each has its strengths and weaknesses. However, on balance, the NSW health system works best when it is decentralised and when decision-making is devolved to local heath authorities.

The natural tendency of centralised bodies (Departments and Ministries) is to want to centralise power and authority, turning local authorities into little more than post boxes for the centralised authority. This is typically linked to a central view that people in the centralised authority know more than people working at the local level. There is simply no evidence to support this perception.

The history in NSW suggests that each time the system is centralised, fewer and fewer issues are dealt with locally and more and more issues are escalated. In the process, minor issues become an unnecessary political or bureaucratic crisis. Unable to address issues locally, staff discontent increases and morale plummets. Likewise, consumer and community discontent increases. The net result is that health is on the front pages of the media almost daily.

When the system is decentralised, the opposite occurs. This is not to suggest that decentralised systems are without problems. No system is. But decentralised systems are better able to deal with issues before they escalate, better able to engage meaningfully with local communities and are better able to understand the needs of local communities. There is no point maintaining Local Health District boards if they do not have the authority to make meaningful decisions.

The other advantage of a decentralised structure is that local authorities are better able to take an intersectoral approach to service planning and delivery. This is particularly important given the overlapping issues in Commonwealth-funded services including primary care, aged care and disability.

As I argue below, there is very little room for further improved technical efficiency in the NSW Health system. The system is efficient from a technical perspective. However, the current level of efficiency is not sustainable. The only way to make the system more sustainable is to shift the focus to allocative efficiency. This can only occur if:

- Each district is made responsible for improving and maintaining the health of its catchment population (and not just be responsible for managing local service delivery).
- Each district is given its fair share of funding linked to a mandate and public responsibility to meet the health needs of the local population.
- Power and authority is genuinely decentralised to allow each District to fulfil this charter.
- Local Health Districts are held accountable for achieving a balanced score card of health system goals including technical efficiency, allocative efficiency and dynamic efficiency. This includes equity of health outcomes (not just equity of inputs), community engagement and consumer experience.
- The Ministry of Health is held accountable for achieving transparent and equitable funding of the NSW health system and for managing those functions that cannot be dealt with locally including Commonwealth-State relations, industrial relations and the planning of quaternary health care and major capital works.

The other natural tendency of centralised bodies (Departments and Ministries) is to regularly propose the reorganisation of local district boundaries and related arrangements. While some of these ideas may have merit, the costs associated with reorganisations are considerable and significantly outweigh any purported benefits.

My recommendation is that the current LHD arrangements remain in place but with greater delegation of decision-making linked to improved funding equity and greater transparency.

Has Technical Efficiency been achieved since the centralised ABF hospital funding approach mandated in 2010?

The most recent Productivity Commission Report on Government Services (ROGS 2023) provides the best available evidence to assess the technical efficiency of the current NSW health system:

- The NSW cost per casemix weighted separation in public hospitals has been, on average, 4% lower than the national figure over the five years to 2020/21. The NSW cost per weighted separation is 2% lower than Victoria and roughly equal par with Queensland over the same period. These two states are fair comparators as all three States have an almost identical number of total public admitted acute separations of 1.6 million p.a. Whilst on face value technical efficiency looks comparable to, or slightly better than these States with similar sized public sectors, one needs to consider the following issues and resultant price paid for this.
- The former statewide NSW public sector wages cap means that NSW nurses are cumulative AUD$120,000 out of pocket by 2023 (The Australia Institute, 2022). This has had the effect of dampening the cost per case in NSW relative to comparable States. If nurses were to be recompensed via a one-off catch up payment, the one-off impact would be very large. In practice, the number of nursing FTE would require that any catch-up payment be spread over several years with a much lower annualised impact. In addition, $2.8bn has already been committed to recruit additional nursing staff.
- These points suggest that the health budget would require a significant injection to catch up and/or achieve new annualised nurse pay levels once the NSW public sector wage caps no longer exist.

- The net effect of both a nursing pay rise and a larger nursing workforce is that current levels of technical efficiency are not sustainable.
- The key implication for the current inquiry is that the picture of technical efficiency presented in the ROGS Report (2023) is not an accurate reflection of contemporary NSW and should not be used as a baseline to model possible reforms. The hospital cost data used in the ROGS Report are more than two years old and, in terms of future modelling, would need considerable adjustment to take into account the nursing issues highlighted above.
- Confirming the same picture, the percentage share of total hospital costs in NSW for labour in 2021 was 54% (Australia 59%). In 2012 this was 58% for NSW health. This decrease is due to NSW Public Sector wages caps, not good management or improved efficiency.
- The impact of previously holding down wages of frontline staff is even more exacerbated when considering the NSW cost of living context: *"Sydney is still the most expensive city in Australia — you'll pay around a **quarter more** for living expenses in Sydney than if you lived in Darwin (41% more in Sydney) or Melbourne (22%), and even more if you stayed in Adelaide (49%) or Hobart (21% more in Sydney)".* (https://www.finder.com.au/cost-of-living-comparison).

Other measures of efficiency

Efficiency can be considered and measured in various ways including measures of technical, allocative and dynamic efficiency. Some key measures are summarised below.

- The NSW average **Casemix Complexity Index** in 2021 was 1.11 (11% above the national average). This compares to Australia (1.0) and Victoria (0.97). The lower Case Complexity in Victoria is because the percentage of patients treated on a same day basis in Victoria is much higher than in NSW (NSW 47%, Australia 55% and Victoria 60%). This suggests that there may still be opportunities for NSW to improve technical efficiency by treating more patients on a same day basis.
- **Access** to timely health care is a measure of allocative efficiency. Access has declined in recent years. The number of separations per 1,000 people in NSW public hospitals dropped from 216 in 2012 to 209 in 2021. In comparison, access improved in the rest of Australia during the same period. Across Australia as a whole, the rate of separations increased from 236 to 247 separations per 1000 people over the same period.
- The **average length of hospital stay** (ALOS) is a measure of technical efficiency. The current acute ALOS in NSW is 3.2 days. This has gone backwards to 2015 levels after achieving a low of 2.8 in the intervening period (NSW Health Annual Report, 21/22).
- The **hospital occupancy rate** is measure of technical efficiency. If occupancy rates are too low, daily average costs increase. But there is strong international evidence that, if occupancy is too high, it results in increases in hospital errors and adverse events and in increases in staff burnout. The current NSW Health occupancy rate of 91% is the second highest since 2010 (NSW Health Annual Report, 21/22).

The above indicators in combination suggest that NSW Health is not quite as technically efficient as it appears at first glance. Further, current levels of technical efficiency are not sustainable because they are driven by underlying factors that are themselves unsustainable. Specifically, the slightly lower cost per case is because the salaries and wages of nurses and other frontline staff have been unreasonably suppressed. The inevitable and necessary significant catch-up injection of funds will

destroy the current technical efficiency picture. Likewise, NSW Health is not achieving its own allocative efficiency goals either (see below).

What was the picture of allocative efficiency prior to the introduction of the current Activity Based Funding (ABF) model and what might it look like now if ABF had not been introduced?

Prior to the introduction of the current ABF model, NSW had a two-tiered funding model. At the highest level, funding was distributed from the centre (Department and now Ministry) to regions (Areas now Districts) on the basis that each region should receive a fair share of funding to meet the needs of its catchment population. This formula was known as the Resource Distribution Formula or RDF. The rationale of funding on a population needs basis was to promote population equity and allocative efficiency.

At the next level, regions would distribute funding to hospitals and health services on an activity basis. The rationale of funding at this level on an activity basis was to promote technical efficiency.

The goal was that this two-tiered funding model would pay equal attention to allocative and technical efficiency.

This two-tiered was subsequently abolished and replaced with the current model whereby regions would be funded on an activity basis. In turn, regions would then fund their hospitals and health services on the same basis.

This change was not without its critics at the time who argued that NSW should not lose its focus on allocative efficiency. The counter argument, and the one that won the day, was that the ABF model could achieve both technical and allocative efficiency.

It is timely for the current Inquiry to re-examine this issue and to do so in a way that makes this issue a central plank of its deliberations. My view is that there is very little room for further improved technical efficiency in the NSW Health system. The system is efficient from a technical perspective. However, the current level of efficiency is not sustainable.

At the same time, the demands on the system will continue to grow at a rate that will outstrip the capacity of government to provide additional funding. The only way to make the system more sustainable is to shift the focus and get the balance right between technical and allocative efficiency. This means moving back toward a two-tiered funding model that pays attention to equity as well as efficiency.

In considering a move to a contemporary two-tiered funding model, it is important that the Funding Inquiry be clear about the strengths and the limits of the current ABF approach. The current ABF model needs to be positioned against more contemporary funding initiatives including "outcomes-based funding" and "value-based care". These models, among others, are designed to drive allocative efficiency.

While the jargon may change over the years, the concepts and goals remain the same. For the NSW health system to be sustainable in the years ahead, more attention needs to be paid to ensuring that the system achieves improvements in allocative efficiency or ‘value for money’. This requires shifting

the focus from ***cost*** to ***value*** with a funding model that gives equal attention to technical and allocative efficiency.

Value for money is fundamental at both the population and individual patient level:

- Services of equal cost are not necessarily of equal value. If two services cost the same, priority should be given to funding those services that are of more value.
- Services of equal value are not necessarily of equal cost. If two services are of equal value, priority should be given to funding the service that can be delivered at lowest cost.

Re-visiting the Resource Distribution Formula and its focus on population need, equity and allocative efficiency

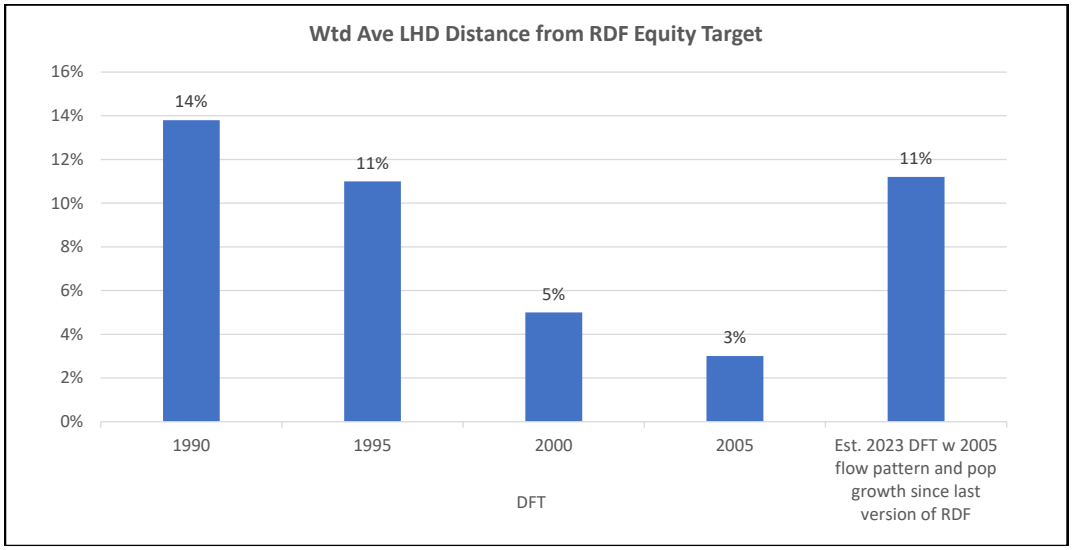
A preliminary analysis of NSW Health system allocative efficiency has been undertaken for this submission, using one tool to measure equity - the last published RDF information in 2005. For this submission, the 2005 RDF assessment was adjusted for population growth to 2023, in order to estimate an approximate new RDF target. The RDF target was then compared to the current allocation shares of the health budget to LHDs in 2023 (excluding Mental Health, which was excluded from the overall 2005 RDF version as the MH RDF was still being developed).

A key goal of the RDF was that each region would receive its fair share of funding. This was measured by a metric known as Distance From Target (DFT). The goal was that each region would be funded within +/-2% of its fair share. The average DFT was 14% when the RDF was introduced in 1990.

With some caveats (see below), the goal of +/-2% was actually achieved in 2008. This can be seen in the figure below.

Using the best available public data, the situation now is that the system has gone from being equitably funded then to being very inequitable again. I estimate that the average LHD Distance From Target (DFT) is now back to 11%. In other words, funding for the average LHD is now 11% from where it should be on an equitable population basis.

This is close to the picture that existed in 1990 when the RDF was introduced. If ABF was to achieve both technical and allocative efficiency, it has clearly failed with respect to population equity and allocative efficiency.



Notes to Graph:

- WSLHD population growth since 2005 has been 34% and SWSHD 24% to 2023. Future planning and budgeting is needed now to meet the population needs for 2035 and beyond.
- Excludes Mental Health as a formula approach was still being developed in 2005. This would add approximately $1.5 billion to the RDF funding pool and any inherent inequity gaps.
- Justice Health and perhaps also the specialist Children's Hospitals need to be funded outside the RDF as they do not have distinct resident populations.
- Patient flows have been held steady at the base pattern in 2005 (hence any movement in net outflows from LHDs would suggest reduced ability to access care close to home).
- The RDF funding pool needs further refinement to remove donations and Special Purpose funds not allocated across all LHDs.
- The Need Index factors need updating (SEIFA, SMR <65, ATSI, Rurality)
- Other RDF factors should also be updated (weightings and adjustments for population groups, T&R and cost factors outside control of LHDs, private sector utilisation etc.)
- Whilst all LHDs have experienced budget growth since 2005, the shares have changed due to use of other funding mechanisms (away from allocative to technical efficiency focus), priorities and flow changes.

This high-level preliminary analysis is based on the best available data I was able to access. If it is approximately correct, the conclusion is that the system has gone back to 1995 levels on this former health goal. However, some technical aspects of this analysis may not be completely correct as they are based on incomplete data. Th reason is that it is now demonstrably difficult to access data. I would contend that a proper independent update of the 2005 RDF formula or other suitable tool to measure equity of resource distribution is required.

This raises a related issue. Since the introduction of the current ABF model, there has been a real lack of transparency from MoH in relation to measures of allocative efficiency. I do not think that this lack of transparency is acceptable. Achieving population equity and allocative efficiency is a

fundamental health system goal (or should be). System managers need to be publicly accountable for such an important goal for the residents of NSW. This requires that all information be transparently available to those who are interested.

Should NSW Health return to a model designed to explicitly achieve allocative and technical efficiency?

NSW Health's previous funding approach is best described by a former Health Minister's Foreword in the last published version of the Resource Distribution Formula Technical Paper, 2005 (see next page).

As this Forward sets out, the RDF was previously used to guide the allocation of funding to Area Health Services (now Local Health Districts) and to monitor progress towards the achievement of geographical equity in health funding across NSW. The RDF was based on a firm policy platform that population-based funding should be directed to communities in accordance with their health needs. This policy commitment was designed to address one of the key contributors to health inequalities: inequitable access to health services.

Population needs-based funding recognises that equitable access is a prerequisite to ensuring that disadvantaged populations have fair access to effective services. This needs to be linked to planning mechanisms that aim to increase the self-sufficiency of each district and thus minimise the number of patients travelling long distances for services that can be efficiently provided locally.

The RDF has had a critical role historically in directing a higher proportion of funding to under-developed districts and to those experiencing rapid population growth. Consistent with the lack of transparency about equity in general, the current pattern of flows across LHDs is not known or, if it is, it is not made public. A key analytical task of the Funding Inquiry should be to establish whether flows have continued to reflect historical patterns, or maintained the former steady trend of reversals to provide services closer to home, as seen under the previous health funding approach.

Minister's Foreword

The achievement of greater equity in the allocation of health care resources is an important objective of the NSW Government. The active pursuit of this objective over many years has been a major contributor in the people of NSW having one of the highest standards of living and health status in the world – indigenous health being a notable exception.

The Resource Distribution Formula (RDF) is one widely accepted mechanism that is used to achieve a more equitable distribution of health care resources across NSW. The RDF also supports a devolved local decision making structure within NSW Health and is similar to formula-based funding mechanisms used in other countries.

Using demography and future population projections as its basis, the RDF allows funding to be directed in a planned and rational way to areas of NSW that are experiencing growing demand. People moving to growth areas expect services and infrastructure such as hospitals to be available. Demography is destiny and the NSW Government also needs to make sure those areas in NSW who service a higher proportion of older people are adequately resourced.

Since the RDF's inception in the late 1980s the NSW Government's progress in achieving a more equitable distribution of resources has been excellent. Today, the degree of inequity in the allocation of the NSW health budget across NSW is five times less than what it was fifteen years ago.

The RDF is not the only factor in determining the allocation of the health budget in a given year. Other mechanisms, such as performance management and targeted program funding, also need to be deployed. However the RDF provides an important way the Government can be accountable to the people of NSW in terms of achieving a key objective of health – equity of access to services. This in turn is an important factor in improving the health status of the population.

The alternative to a formula approach is resource allocation based on historical patronage, on those with the loudest voices, or on those who can prepare the highest quality bids. Formula funding, such as the RDF, removes these irrational influences and provides an objective and fair way of assessing the health care needs of particular groups. It thereby provides an explicit presentation of the criteria for funding and increases Government transparency in decisions.

I commend the NSW Department of Health on this revision of the RDF.

The Hon Morris Iemma, MP
Minister for Health

NSW Health Resource Distribution Formula Technical Paper – 2005 Revision

The guiding principles of the population needs-based funding approach (as put into effect by the RDF) are set out in the box on page 8.

Box 1: RDF Guiding Principles

1. To guide the allocation of available resources to Area Health Services to enable Areas to provide their local communities with comparable levels of access to health services taking into account:
   - the assessed health needs of the local population
   - flows of patients between Area Health Services and to Children's Hospital Westmead
   - the local population's utilisation of private health services
   - additional cost components in providing services to specific populations (such as additional transport and infrastructure costs in rural areas and the cost of interpreter services)
2. To recognise funding of statewide and selected specialty services which benefit the entire health system and are provided in limited locations.
3. To take account of additional costs associated with severity not currently recognised in casemix measures faced by major tertiary referral hospitals and specialist paediatric hospitals, to reflect the higher needs of these patients.
4. To reflect the need for Area Health Services to provide additional health services to improve the health status of indigenous and homeless population groups who experience significantly lower health status.
5. To assume that Area Health Services achieve comparable levels of efficiency in the provision of services.
6. To reflect the strategic directions set for Area Health Services in NSW and the NSW Department of Health.

NSW Health Resource Distribution Formula Technical Paper – 2005 Revision

The RDF was deliberately neutral on the issue of technical efficiency, as other policy mechanisms were used in NSW to deal with the technical efficiency objective, including ABF/episode funding and hospital-cost benchmarking. Consideration of the substitution and impact of the distribution of resources under federal programs such as the MBS and PBS, and private financing, were also regarded as important to the achievement of equity.

In 2005, plans for the then population-needs based funding model included ensuring resources for health programs targeted at intervening in the processes that lead to health inequalities were appropriately distributed across LHDs, to reflect the underlying target groups for these programs. These ideas are best summarised in a published paper by Gibbs et al, 2002 listed in the references to this submission.

It should be noted that the current ***Health Services Act, 1997 no 154***, requires the Minister is to have regard to several matters including consideration the size and health needs of the population. https://legislation.nsw.gov.au/view/html/inforce/current/act-1997-154#ch.10-pt.2

The Department advises the NSW Minister for Health on the allocation of funds to Area Health Services. Population-based funding principles are central to the construction of the Area Health Services' budgets. In determining funding allocations for Areas, regard is given to:

- The size and health needs of the population resident within the Area Health Service concerned.
- Health services provided to patients from outside the region of the Area Health Service concerned (ie patient flows).
- The net receipts and expenditures of the Area Health Service for the financial year.
- Probable requirements for capital maintenance and expenditure of the Area Health Service for the financial year.
- Such other matters as are prescribed by the regulations or as the Minister thinks fit.

The RDF is one mechanism through which these principles are achieved. The Formula, which guides the construction of budgets for Area Health Services, is developed by the Department, incorporating the advice of the RDF Advisory Committee.

A key point is that the formula is intended to identify equitable shares of resources for Area Health Services that are available for providing a comprehensive range of health services to the local population. The Formula does not identify the total level of resources available, as this is a matter for Government to decide in the context of the State Budget.

NSW Health Resource Distribution Formula Technical Paper – 2005 Revision

A proposed way forward

The core of this submission is an argument that a new funding model is required that explicitly considers both technical and allocative efficiency.

This would require the following initiatives to be undertaken, at a minimum, to assess the current baseline picture of allocative efficiency:

- Develop either a new tool to measure the degree of allocative efficiency and equity of access to health resources, or update the 2005 RDF including a new Mental Health formula, current patient flows, and by using population projections to, say, 2035 as a target for health funding and capital resource planning.
- On the latter option, a quicker, simplified version of the last published RDF in 2005 may be possible, as some factors are not as material as the overall key drivers of the formula which are population demographics and growth, plus the updated Needs factors and flows.
- Re-establish the annual publication of potentially contestable cross-LHD and Interstate patient flow numbers and associated costs in LHD Annual Reports, to show accountability for services provided to/by other LHDs and States/Territories and as a measure of access and LHD self-sufficiency.
- Incorporate a methodology into the tool to better target health funding with desired outcomes using cost effective and evidence-based interventions, to allocate a share of resources as a component of the population needs approach.
- Improve Teaching and Research cost allocations.
- Maintain ABF funding from LHDs to facilities, to maintain consistency with Federal funding arrangements and existing well established coding, costing, funding and information systems at facility and patient level, which are already in place and well understood by clinicians and system managers.
- Sustainability targets and estimates of Greenhouse Gas emissions from hospital waste by DRG patient category can now be established as a separate DRG cost bucket, using data on type and weight of waste collected from hospitals using statewide contractor invoices and relationships to various hospital statistics such as patient average lengths of stay, use of theatre, ICU and emergency. This would allow for greater transparency for clinicians when treating different patient types as an added sustainability consideration in decision making and associated consumption of hospital resources. It could also be extended to estimating consumed goods, in addition to the waste component using hospital procurement data and internal costing information. The resulting estimate of the indirect cost of emissions from treating patients could therefore become a triple-bottom line figure to hospital/LHD financial statements, using readily available carbon emissions lifecycle conversion rates and NSW Treasury carbon costs per tonne of CO_2e. HealthShareNSW has undertaken some internal cost modelling of this concept, which would have not only implications for NSW ABF and sustainability goals, but also for other State, national and many international government funders and providers which also use the DRG classification for ABF purposes.
- Whilst Service Agreements (see NSW Health, 2023) hold some promise to promote achievement of better health outcomes, the agreed KPIs and measures are only weakly linked to funding (referred to as the Purchasing Framework for each LHD). The vast majority of LHD budget

allocations are still linked directly to activity measures, with marginal funding for incentivising better performance on outcomes and meeting current and future demand growth in areas of greater need.

- Service Agreements do not include some key access measures like flows/self-sufficiency, travel times or other measures listed in the ROGS report, like more specific comparisons of morbidity and mortality rates for indigenous persons and other high need groups across each LHD.

Implementing a revised funding approach that incorporates both **allocative** (population needs, and funding for targeted interventions to achieve better health outcomes), plus **technical** efficiency (ongoing use of ABF), is only one part of the policy, planning and management toolkit to improve the health status of NSW residents, including for indigenous, mental health and other priority groups with higher levels of health need.

The WHO (2003) recommends addressing allocative efficiency by tackling several additional areas to just funding models alone (see Attachment). It is therefore recommended that NSW Health consider this multi-dimensional toolkit when implementing any new funding arrangements, as funding alone will not be sufficient to maximise the desired patient and system outcomes. The WHO recommends use of a toolkit with the following core elements, with additional components depending on the unique circumstances of each jurisdiction, shown in a diagram further below:

3) Human resources planning The mix of health professionals, as well as their locations, are associated with the mix of health interventions. A cost-effective mix of health professionals is essential for the provision of a socially desirable mix of interventions. Human resources planning can start from the planning of medical education by controlling the types and the number of student enrolments, and can also provide incentives to motivate enrolments for health professionals in shortage, to encourage them to work in underserved areas, and to pay for their services relatively generously through fee structuring.

4) Health facility planning The types, quantity, size and location of health facilities are associated with the mix of health interventions provided. To improve allocative efficiency, health facilities should be planned so that a package of cost-effective interventions should be available for all, provided at the lowest possible level of administration, and cost-ineffective interventions are controlled to an acceptable minimum.

5) Capital planning The number of beds, the stock of major medical equipment, and the total capital investment can be brought under the control of governments. Overinvestment in capital can lead not only to cost-escalation, but to overprovision of capital-related services. A quota for the numbers of beds, and equipment per 1000 population should be used; major investment should be certified by government agencies; and capital cap should be used to control the overall spending on capital investment.

20) Case payment This can be used to improve allocative efficiency if provider performance monitoring prevents providers from underprovision of necessary interventions. Case fees should be structured to allow more generous payment for the diagnoses for which cost-effective treatments are available; case payment should be as inclusive as possible, and implemented for all payers with a global budget to cap the overall spending for health care.

21) Global budget This is a powerful tool to control costs. To improve allocative efficiency, policy-makers and providers must be educated to use the budget wisely (providing more cost-effective interventions and fewer cost-ineffective ones), with incentives for providers to do so. The implementation of a global budget requires an integrated payer system, and a full global budget is more effective than a partial one. Almost all other tools can be combined with global budgets for improving allocative efficiency.

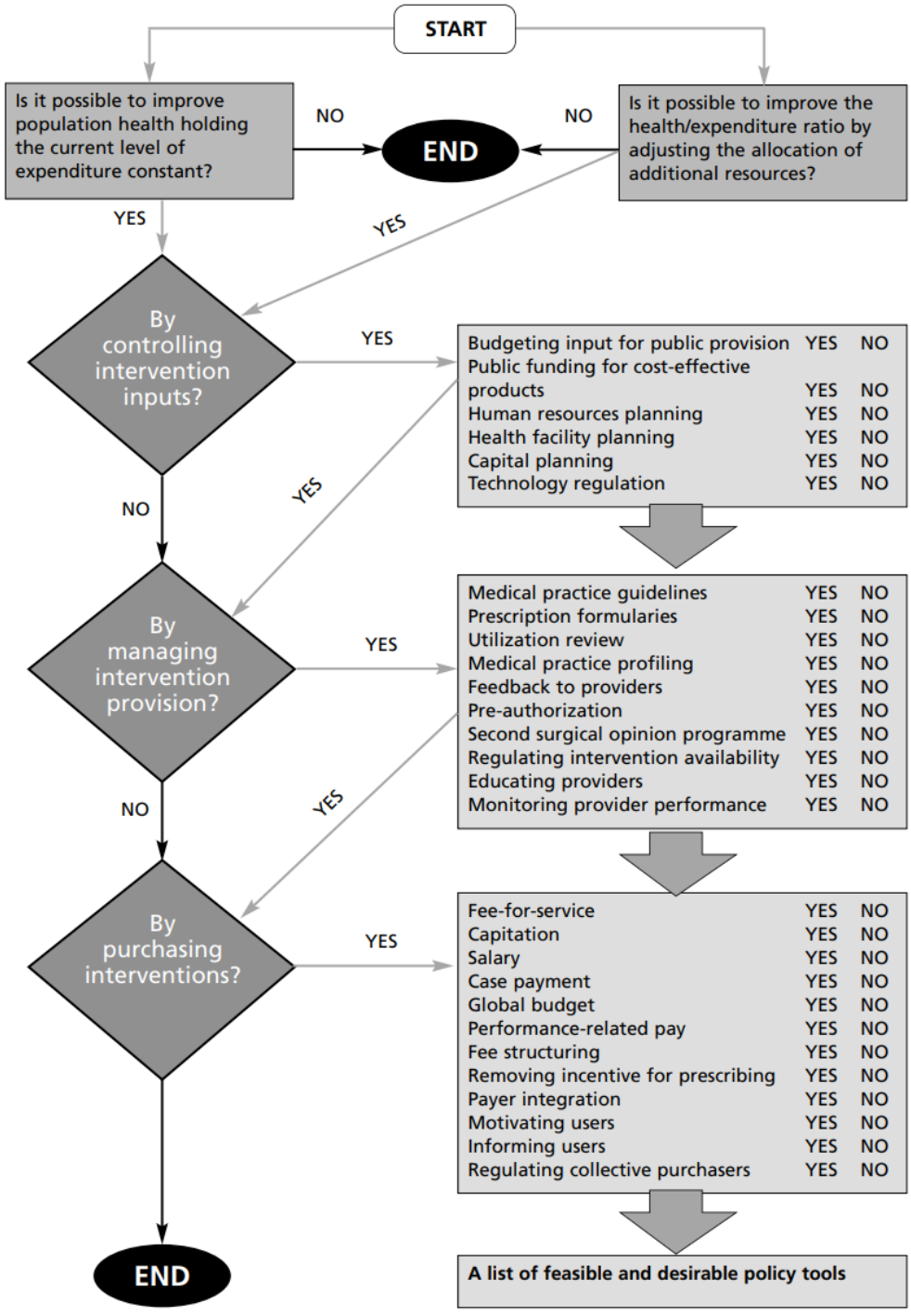
Thank you for considering this submission. I am happy to provide further information on request.

Professor Kathy Eagar

October 2023

Attachment

Figure 7. A flowchart for the selection of policy tools in a toolkit for improving allocative efficiency



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