NSW Treasury

NSW Treasury Supplemental Submission

Health Non-State Services Factor

April 2024

NSW GOVERNMENT

Acknowledgement of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We pay respect to Elders past and present and commit to respecting the lands we walk on, and the communities we walk with.

We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas and sky.

We acknowledge the ongoing stewardship of Aboriginal and Torres Strait Islander peoples, and the important contribution they make to our communities and economies.

We reflect on the continuing impact of government policies and practices, and recognise our responsibility to work together with and for Aboriginal and Torres Strait Islander peoples, families and communities, towards improved economic, social and cultural outcomes.

Artwork:
Regeneration by Josie Rose

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List of Acronyms

AIHW	Australian Institute of Health and Welfare
APRA	Australian Prudential Regulation Authority
ED	Emergency Department
GP	General Practitioner

Health Non-State Services Factor

1 Context

NSW Treasury's Tranche 1 submission considered the current approach to substitutability in the Health assessment, with a focus on the theoretical linear relationship between comparable state and non-state services. We argued this relationship was overstated due to a range of factors that reduce service substitutability.

We contended that the non-state sector would not impact state service provision to the extent assumed by the Commission given the existence of unmet demand, the inducement of additional demand, the temporal availability of state and non-state services, the practical capacity of non-state services to substitute for comparable state services, and the effects of patient decision-making on substitutability.

Our arguments were presented on the basis that the non-state sector would have a demonstrable effect on state sector services. While we suggested that substitutability was likely overstated, the adjustments we proposed would have resulted in marginal changes to the non-state sector methodology, rather than a full revision of the methodology. At that time, New South Waled agreed that the conceptual position adopted by the Commission appeared reasonable.

Our Tranche 1 submission did not, however, assess the evidence for the core conceptual position that increasing non-state services does, in practice, result in decreasing state services. We have subsequently concluded that available data does not support the conceptual position, despite its apparent reasonableness.

The Commission visited New South Wales in March 2024 following our Tranche 1 and Tranche 2 submissions. During the visit, we presented our analysis calling into question the underlying assumption behind the non-state sector adjustments. In response, the Commission reflected that such analysis was not part of a formal submission from NSW Treasury. This supplementary submission is intended to formalise the analysis we presented as part of the state visit, so that it may be properly incorporated into the Commission's reports.

The Commission has a conceptual position that as non-state services increase, comparable state services will decrease. To reflect this conceptual case, the Commission has previously developed two methods for estimating the relative impact of the non-state sector in each jurisdiction. These are the current direct method and the prior subtraction method. Under either method, the approach is intended to derive the potential expenditure impact that the non-state sector has on the provision of state services.

State comments on these methods over multiple reviews have primarily focused on the effectiveness of the methods in assessing the impact of the non-state sector. The Commission and states have been operating on the basis that the health non-state sector adjustment is itself sound, and submissions have centred on the most appropriate ways to adjust the existing methods.

We believe that the Commission must also investigate whether there is actual, data-driven evidence that demonstrates that the conceptual position occurs in practice. A conceptual case alone is not sufficient to maintain such a significant redistribution of GST. If the Commission does not have real world, data-driven evidence that the non-state sector impacts the provision of state services, it is unclear how the non-state services adjustment is justified for inclusion in the current GST methodology.

From our analysis, we find there is an absence of robust and reliable data supporting the conceptual case for a non-state services adjustment for health services. Given this, we believe the Commission

should reconsider its application of the adjustment, potentially removing or heavily discounting the current non-state services factors.

We recognise that this submission is made late in the review process. As noted above, our intention is to formalise representations made to the Commission as part of its visit to New South Wales in March 2024, such that the Commission can reference our arguments in its reports. We do not believe that the analysis presented below would substantially change submissions made by other states, which focus on the mechanics of the non-state sector adjustment.

2 NSW Treasury position

We have investigated the evidence for the non-state sector adjustment through three key components; emergency departments (EDs), admitted patients, and non-admitted patients. The community and public health services component is already dependent on unrelated proxy measures of non-state activity, so has not been considered further in this analysis.

What our analysis demonstrates is that the current conceptual model for non-state services in the health assessment, for EDs and admitted and non-admitted patients, is not supported by the available data. In the absence of supporting data, it is not evident that non-state services adjustments can be maintained in the Commission's health assessment methodology.

While we consider that there are issues stemming from the lack of supporting data, the data used by the Commission is also subject to its own quality issues. Some key issues, particularly in the use of admitted patients data, include:

- Data used for the non-state services adjustment for admitted patients is impacted by state policy and exhibits serious anomalies undermining its use.
- There are significant differences in Australian Prudential Regulation Authority (APRA) and Australian Institute of Health and Welfare (AIHW) data on the use of private health insurance. APRA data is currently used by the Commission for the admitted patient non-state services adjustment. The differences in these two data sources have significant financial implications for individual jurisdictions.

Given the absence of supporting data underpinning the Commission's conceptual model for non-state services, as well as serious data issues impacting the calculation of the non-state services factors, the Commission should not adjust assessed expenditures for differences in the level of private services within the health assessment.

Additionally, the Commission's assumption of the level of cost savings to the public sector arising from additional of private health insurance admitted patients is overstated. The gross cost of private health insurance patients is lower than the average for all patients.

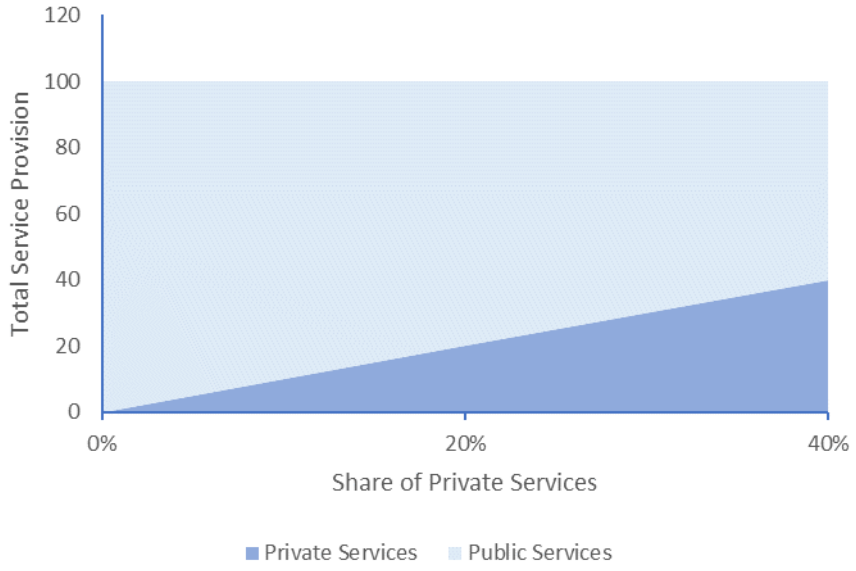
3 Conceptual model

The Commission currently makes an adjustment to the assessed expenditure of each state for differences in the volume of services delivered by the private sector, based on the assumption that these services are substitutable for services provided by the public sector. The most prominent example of this is school education, where private schools are seen as a direct offset to the need for schools to be provided by the public sector[1].

[1] No allowance is made in the Commission's model for higher costs (e.g. school fees) borne by the community in jurisdictions using a higher proportion of privately provided services.

In Australia, health services are provided by both the public and private sectors with the latter often receiving significant publicly funded subsidies through Medicare. Key to the conceptual model used by the Commission is an assumption that higher levels of privately provided services do not impact on the total volume of services provided by the public and private sectors combined. The Commission's model is illustrated in Figure 1.

Figure 1 CGC conceptual model for non-state services



NSW Treasury has attempted to verify the validity of the Commission's conceptual model in the analysis outlined below. We have focused in this submission on testing the underlying data that would evidence the existence of the conceptual relationship, rather than evaluating the reasonableness of the conceptual position itself. Further comments on the conceptual position for non-state services adjustments are contained in our Tranche 1 submission.

4 Emergency departments

What does the Commission currently assume?

The Commission assumes that Triage 4 and 5 ED presentations to public hospitals could be treated by a general practitioner (GP) in a private setting and, therefore, these services are substitutable.

The Commission currently assumes:

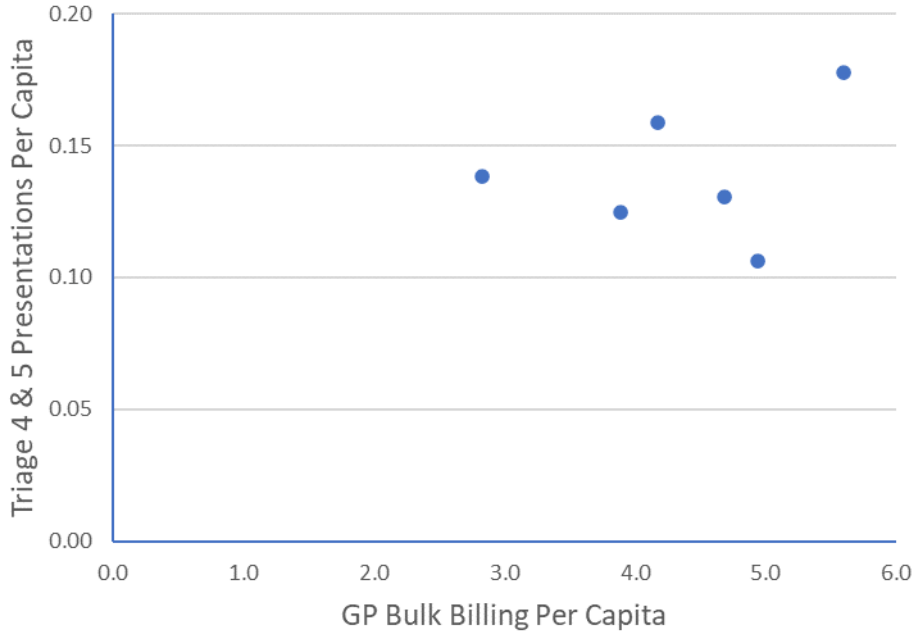
- 23 per cent of ED presentations could be treated by a GP;
- While GP-type services provided by EDs represent 23 per cent of total presentations, these cases are likely to be less complex and therefore represent only 15 per cent of total ED costs; and
- Higher levels of GP bulk billed services result in less demands being placed on public sector hospital EDs and that this lower demand represents a cost saving to those states.

What does the data indicate?

New South Wales acknowledges the plausibility of the Commission's assumption. However, using AIHW data, NSW Treasury has been unable to find evidence to support this assumption and believes the Commission should reassess the need for a non-state services factor for EDs.

Figure 2 shows the relationship between Triage 4 and 5 ED presentations per capita and the level of GP bulk billing per capita in each state[2]. If a negative correlation existed between these services, the data should show a downward sloping (to the right) relationship. Figure 2 shows no evidence of a negative correlation between these variables.[3]

Figure 2 Triage 4 and 5 ED presentations v GP bulk billing – 2022-23

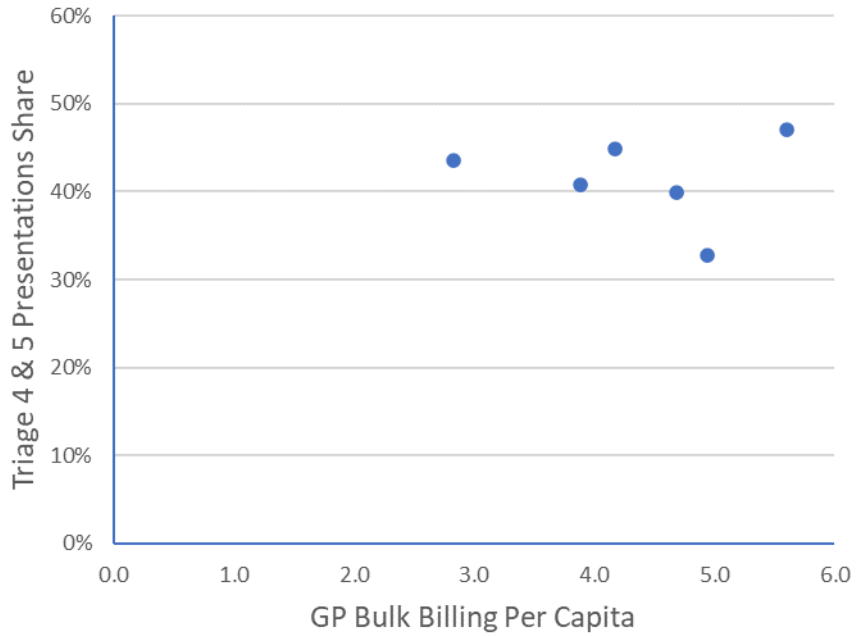


Furthermore, if a negative correlation between Triage 4 and 5 ED presentations and bulk billed GP visits exists, the share of Triage 4 and 5 presentations as a proportion of total ED presentations should be lower in high per capita bulk billing GP jurisdictions. Figure 3 again provides no evidence to support a lower proportion of Triage 4 and 5 ED presentations in high bulk billing GP jurisdictions.

[2] Triage 4 and 5 ED presentations are of a nature that could be handled by a GP.

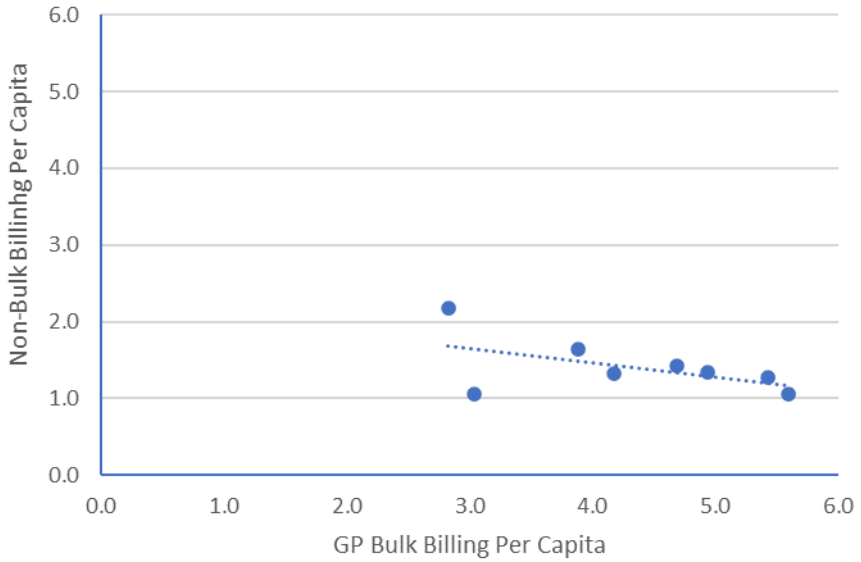
[3] Victoria and the Northern Territory are excluded from this analysis. In the case of Victoria, AIHW data for Triage 4 and 5 is qualified due to the exclusion of GP co-located clinics and the Northern Territory is a clear outlier for SDC reasons.

Figure 3 Triage 4 and 5 ED presentations share v GP bulk billing - 2022-23



NSW Treasury then investigated the relationship between bulk billed and non-bulk billed GP services. As expected, higher levels of bulk billed services per capita resulted in lower levels of non-bulk billed services per capita as shown in Figure 4. However, higher levels of bulk billed GP services per capita did not result in a one-for-one reduction in non-bulk billed services.

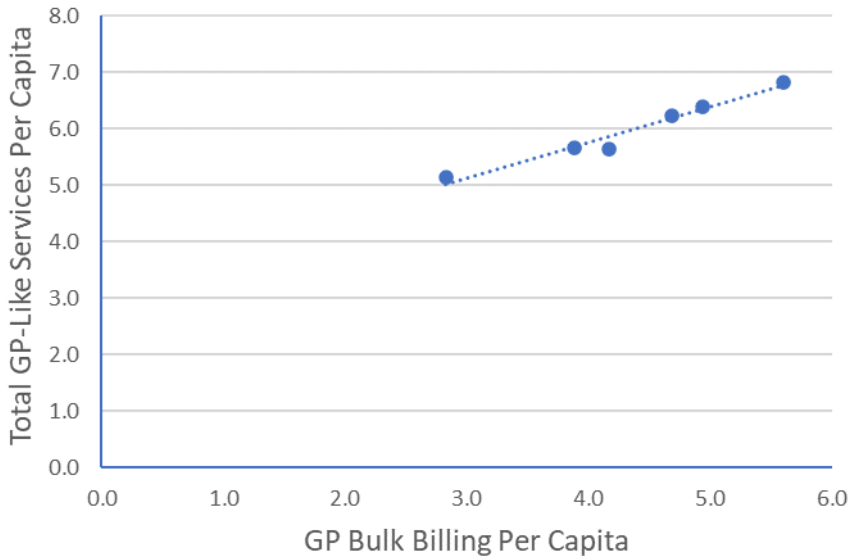
Figure 4 GP bulk billing v non-bulk billing – 2022-23



Finally, we compared the level of bulk billing with an estimate of total service provision per capita.[4] This showed that higher levels of bulk billed GP services resulted in higher levels of total service provision per capita. Such a result is not surprising and simply reflects basic economics which suggests that services offered for free are likely to be consumed more than priced services.

[4] Defined as all GP services plus Triage 4 and 5 ED presentations.

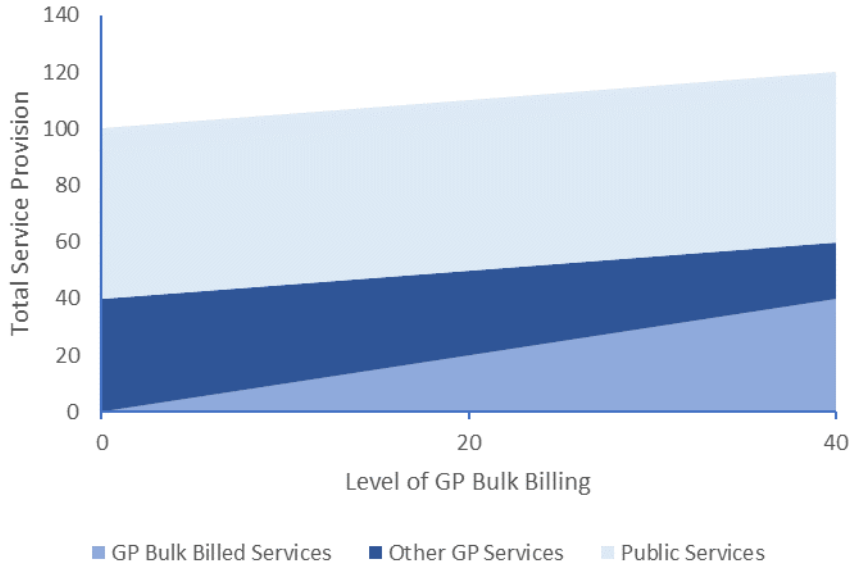
Figure 5 GP bulk billing v total GP-like services – 2022-23



Attempting to understand the reasons for higher levels of bulk billing in some jurisdictions, we found a high correlation between the proportion of GP services that were bulk billed and the number of GPs per capita in each state. That is, more doctors per capita competing for services appears to result in lower average prices being charged (i.e. a higher share of bulk billed GP services).

In summary, our data-driven analysis concludes that the current conceptual model for EDs should be replaced with one which sees higher levels of bulk billed GP services somewhat reducing the level of non-bulk billed services but having no impact on the level of publicly provided services. This proposed model is illustrated in Figure 6.

Figure 6 Proposed alternative ED conceptual model



Factors driving ED use

The Commission's conceptual model for the ED non-state services factor assumes that the decision to attend a GP or a hospital ED is highly sensitive to patient cost factors. That is, the greater the availability of free (i.e. bulk billed) GP services, the less likely a patient will attend a free hospital ED.

In practice, the decision to go to a GP or a hospital ED is influenced by a wide range of price and non-price factors. We believe the Commission's focus on price factors risks being misled. We have investigated this in our Tranche 1 submission and provide further discussion here.

Data indicate that the lack of availability of GPs in rural areas results in higher numbers of ED presentations. We acknowledge therefore that there is some relationship between GP and ED services, if only reflected in data when there is an absence of one of those services.

However, where GPs services are available, price plays only a small part in the decision to attend a hospital ED or visit a GP. Some non-price factors that weigh on this decision are time of day and the urgency of the service requirement, the location of the service delivery point, the convenience of a timed GP appointment and the established relationship between a GP and their patient. Previously, NSW Health has indicated that most bulk billed services are not available after hours and therefore attending a hospital ED is the only option at certain times of the day.

A further factor leading to the absence of a trade-off between bulk billed GP services and attendances at a hospital ED is the incentive structure built into the Medicare model. Currently a bulk billing GP receives the same remuneration for consultations of 6 to less than 20 minutes. As a result of this, NSW Health advise that bulk billing doctors often simply refer more complex patients to the hospital ED. In other words, additional bulk billing GP services simply results in two services being delivered. Ironically, the non-state service that caused the provision of the state service is then being treated in the Commission's method as a substitute for that very same state service.

In calculating the current ED non-state services factor, the Commission only considers the level of GP bulk billing services. However, hospital EDs offer a wide range of other free services such as pathology and imaging services. If price were to be considered the primary determinant of the decision to attend a GP or a hospital ED, a true comparison would encompass a broader range of services.

NSW Treasury has interrogated Medicare data which indicate that the proportion of bulk billed services normally ordered by GPs (pathology imaging, etc.) in each state is far more similar than the proportion of bulk billed GP services. If the Commission continues to measure the relative size of each state's non-state substitute for ED services, it should use the broader measure of bulk billed services, not just bulk billed GP services.

5 Admitted patients

What does the Commission currently assume?

The Commission assumes that a proportion of admitted patient separations in the public sector could be treated in the private sector and, therefore, these services are substitutable.

The Commission currently assumes:

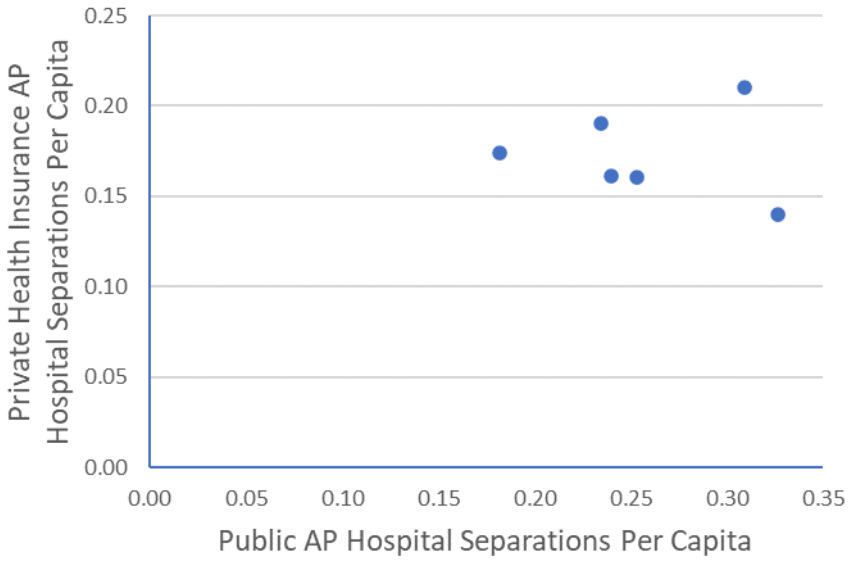
- After considering levels and usage of private health insurance, 15 per cent of admitted patient separations in the public sector could be undertaken by the private sector;
- Higher levels of private admitted patient separations result in less demand for public sector hospitals and this lower demand represents a cost saving to those states; and
- Savings accruing to jurisdictions resulting from higher private admitted patient separations are at the average cost of all admitted patient separations.

What does the data indicate?

NSW Treasury acknowledges the plausibility of the Commission's assumption. However, again we have been unable to find evidence to support this assumption and believe the Commission should reassess the validity of a non-state services factor for admitted patients.

Figure 7 compares public and privately insured admitted patient separations per capita across jurisdictions. If a negative correlation existed between these services, the data should show a downward sloping (to the right) relationship. Figure 7 shows no evidence of a negative correlation between these variables[5].

Figure 7 Public versus private health insurance admitted patient hospital separations – 2021-22



Based on the lack of any negative correlation between private health insurance and public admitted patient separations, NSW Treasury proposes that the current conceptual model be replaced with one that shows no trade-off between these services.

Is the non-state service provision indicator used by the Commission fit-for-purpose?

Should the Commission believe a non-state services adjustment is still required for admitted patients, NSW Treasury investigated the current data used by the Commission and found it likely to be policy influenced and displaying significant anomalies requiring further investigation. Table 1 shows the share of admitted patient separations categorised by private and public hospitals and by funding source.

[5] Data for Tasmania, ACT and the Northern Territory is combined by the AIHW for confidentiality reasons.

Table 1 Admitted patient separations by funding source, public and private hospitals – 2021-22

	Share of Patients (%)						
	NSW	Vic	Qld	WA	SA	Tas, ACT & NT	Total
Public hospitals							
Public patients	80.0	89.4	90.3	88.0	87.7	91.5	87.1
Private health insurance	16.7	8.3	8.0	10.1	9.9	5.9	10.5
Other	3.3	2.2	1.7	1.9	2.5	2.6	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private hospitals							
Public patients	4.1	3.6	6.0	21.8	4.2	0.9	6.4
Private health insurance	82.2	83.5	79.0	69.9	84.8	80.4	80.4
Other	13.7	12.9	15.1	8.3	11.0	18.7	13.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All Hospitals							
Public patients	47.0	57.3	55.2	56.8	51.8	64.8	54.0
Private health insurance	45.2	36.4	37.5	38.3	42.0	27.9	39.2
Other	7.8	6.2	7.2	4.9	6.2	7.4	6.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Share of separations using private health insurance (A)	45.2	36.4	37.5	38.3	42.0	27.9	39.2
Share of population with private health insurance (B)	46.7	42.2	41.0	54.0	44.4	45.1	44.9
Gap (B-A)	1.5	5.7	3.4	15.8	2.3	17.3	5.7

Table 1 indicates the following:

- The share of privately insured patients in NSW public hospitals greatly exceeds the situation in other jurisdictions. NSW Treasury believes this may indicate a more active policy of encouraging public hospital patients to use their private health insurance in this state.
- The proportion of public patients in private hospitals in Western Australia appears anomalous and is not explained by the relative size of public and private sectors in that state.
- The wide gap between the use of private health insurance in hospitals and the prevalence of private hospital insurance in Western Australia and smaller jurisdictions needs investigation.

NSW Treasury is also concerned by the Commission's use of APRA data on the use of private health insurance rather than AIHW data. We understand the Commission prefers AIHW data but has used APRA data in this case because data for Tasmania, ACT and NT are not separately reported by AIHW in its data release.

The use of less-desirable APRA data is having a material effect on the assessment. Table 2 below shows significantly different outcomes for the non-state services factor arise from the use of AIHW data in the 2023 Simulator. In the case of New South Wales, assessed expenditure would have averaged $64 million higher over the three years to 2021-22 while assessed expenditure in Queensland would have averaged $184 million lower.

NSW Treasury believes that confidentiality concerns with AIHW data for Tasmania, the ACT and the Northern Territory can be overcome, and we have suggested a methodology for doing this directly to the Commission staff.

Table 2 Non-state services factor adjustment for admitted patients using alternative methodologies

	NSW	Vic	Qld	WA	SA	Tas, ACT & NT	Total
	$m	$m	$m	$m	$m	$m	$m
CGC - APRA Methodology Data							
2019-20	17.7	121.5	-159.3	29.2	-27.0	18.0	0.0
2020-21	-4.5	249.2	-231.5	17.8	-50.3	19.2	0.0
2021-22	-19.4	272.4	-243.9	28.7	-58.3	20.6	0.0
NSW Treasury - AIHW Methodology Data							
2019-20	85.9	160.1	-342.5	80.0	-38.9	55.5	0.0
2020-21	-12.3	266.7	-396.2	64.7	-10.1	87.1	0.0
2021-22	112.4	261.1	-447.3	77.4	-43.2	39.6	0.0
Variance							
2019-20	68.2	38.5	-183.2	50.8	-11.9	37.5	0.0
2020-21	-7.8	17.5	-164.7	46.9	40.2	67.9	0.0
2021-22	131.8	-11.3	-203.4	48.7	15.1	19.0	0.0
3-Year Average	64.1	14.9	-183.8	48.8	14.5	41.5	0.0

Based on the influence of policy on the use of private health insurance in public hospitals, apparent significant data anomalies, and discrepancies between APRA and AIHW data, we believe the current non-state services adjustment for admitted patients cannot be justified. Should the Commission wish to continue with a non-state services adjustment, we suggest using the level of private health insurance in each state as an appropriate alternate indicator.

What is the cost of public hospital separations transferred to private sourced funding?

Should the Commission continue with the existing methodology or introduce a new methodology for the non-state services factor for admitted patients, the adjustment needs to be based on a realistic assessment of any costs savings accruing to the public sector. Currently the Commission assumes that all admitted patient separations are at the same cost.

The Commission accepts that emergency admissions are primarily the province of public hospitals with limited exceptions, and therefore substitutability between public and private hospitals lies in non-emergency admissions.[6] NSW Health has provided the following data indicating the gross cost of different types of admitted patient separations.

Table 3 Relative cost of public hospital separations – 2022-23

	Gross Cost Per Separation		
	Emergency	Non-Emergency	All
Public Patients	$9,363	$5,269	$6,624
Private Patients	$8,715	$4,762	$6,766
All Patients	$9,205	$5,192	$6,651

[6] Commonwealth Grants Commission, 2020 Review Volume 2, page 169, 2020.

The data indicates that the average cost of separations likely to be transferred to the private sector is around 30 per cent below the average cost of all separations from public hospitals. Thus, any non-state services adjustment needs to be discounted by 30 per cent.

6 Non-admitted patients

What does the Commission currently assume?

The Commission assumes the provision of non-admitted patient-like services by the private sector reduces the need for the provision of these services by the public sector.

The Commission currently assumes:

- Non-admitted patient activity in public hospitals can be separated into three components:
    - Procedure clinics – 8 per cent of activity and 15 per cent of expenditure;
    - Medical consultation clinics (including diagnostic services) – 47 per cent of activity and 54 per cent of expenditure; and
    - Allied health clinics – 45 per cent of activity and 30 per cent of expenditure.
- Only procedure clinics and medical consultation clinics in public hospitals are substitutable with services provided by the private sector, resulting in 70 per cent of non-admitted patient expenditure being potentially substitutable.
- Around 50 per cent of non-admitted patient services in public hospitals are associated with a previous hospital admission. Therefore, only 35 per cent of non-admitted patient expenditure (i.e. half of the 70 per cent of potential services) could be undertaken by the private sector. When combining this approach with a more disaggregated analysis, the Commission concludes that 30 per cent of non-admitted patient services are substitutable.[7]
- Higher levels of bulk billed operations and specialist benefits result in a saving in public non-admitted patient costs.

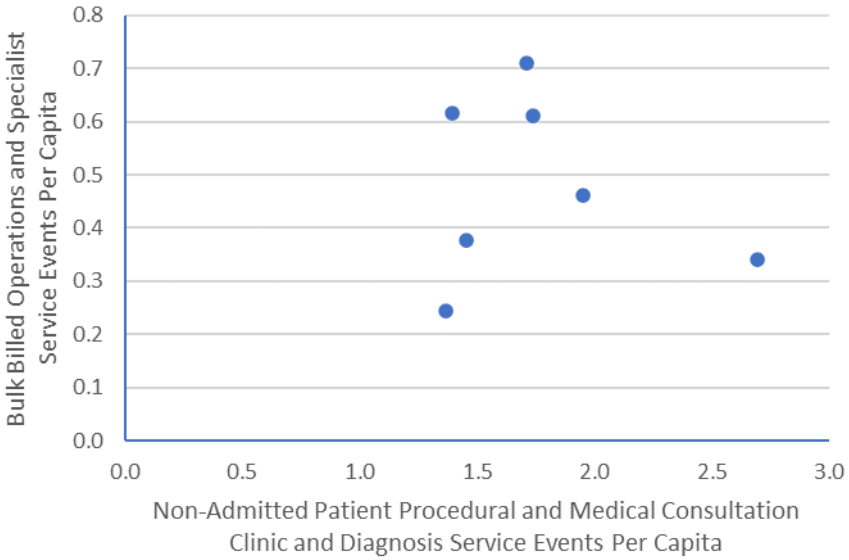
What does the data indicate?

Again, we are unable to see a negative correlation between non-admitted patient service events for procedural and medical consultation clinic and diagnosis service events and bulk billed operations and specialist service events[8].

[7] Per the Commission's consultation paper, updated data implies that maintaining the average of the two methods would result in an average level of 25 per cent substitutability for the 2025 Review.

[8] Data for Victoria has been excluded as it is not comparable due to the absence of AIHW data for diagnostic services.

Figure 8 Non-admitted patient service events v bulk billed operations and specialist service events per capita – 2021-22



Given the lack of any apparent relationship between non-admitted patient services and bulk billed services provided by the private sector, NSW Treasury questions the current non-state services adjustment for non-admitted patients.