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Commonwealth Grants Commission

2020 REVIEW

REVIEW OF SUBSTITUTABILITY LEVELS FOR THE HEALTH CATEGORY

STAFF DISCUSSION PAPER
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INTRODUCTION

1 To implement the direct approach for the Health assessment, it is necessary to identify the proportion of State service provision that is affected by the availability of similar services in the non-State sector. This proportion is referred to as the substitutability level.

2 Confirming the levels of substitutability is a priority for the Commission in the 2020 Review, and preliminary work has been presented in *CGC 2018-01/12-S, Health*.

3 This paper describes the approach staff have taken in reviewing the levels of substitutability and the estimated levels for each Health component. Staff have also proposed the indicators for measuring non-State sector service use.

4 Staff are seeking State comments on the proposed levels and indicators.

BACKGROUND

Impact of non-State sector service provision

5 State governments are not the sole providers of health services. Health services are also provided by the non-State (largely private) sector. In the Health assessment, we want to reflect the impact of non-State sector services on the demand for State services.

6 The effects of the non-State sector on State provided health services are reflected in two places in the Health assessment.

- The calculation of the socio-demographic composition (SDC) disability reflects the fact that there are lower levels of private health providers as remoteness increases, which leads to an increased use of similar State services. This increased use can be seen in the national use and cost data within each component.
- The calculation of a non-State sector adjustment reflects the different levels of private provision in similar regions between States. The scale of these adjustments is based on the proportion of State spending on services that are also provided by the non-State sector (for details about the non-State sector adjustment, see Attachment A). This is referred to as the substitutable proportion of State services, or substitutability level. The proportion for each component adopted in the 2015 Review is shown in Table 1.

Table 1 Substitutable expense proportions, 2015 Review

Component	Component expense 2016-17	Proportion of substitutable services	Substitutable expense 2016-17
	$m	%	$m
Admitted patients	38 163	15	5 724
Emergency departments (ED)	4 931	15	740
Non-admitted patients	4 931	40	1 972
Community and other health	12 416	70	8 691

Source: Commission calculation, 2018 Update.

Conceptual case

7 Where there are similar health services provided by the State and non-State sectors, these service are considered to be potentially substitutable. For example, childhood immunisation can be provided free of charge by either a State community health centre or a bulk billed general practitioner (GP). The availability of bulk billed GP services would likely reduce the demand for similar services provided by the State sector. The more immunisation services performed by GPs, the greater the impact on the demand for immunisation services provided by State community health centres. We regard such services as substitutable.

8 However, there are many services that would not be regarded as substitutable, including:

- services that are not provided by the State sector. For example, States provide few optometry/allied health services, so changes in the private sector provision of these services would have little impact on the demand for State services.
- services that are not available in the non-State sector. For example, treatment for the most urgent and complex conditions (for example, ED triage category 1) is provided free of charge in public hospital EDs, but not by the non-State sector.

What evidence is needed

9 Identifying non-State services which affect what States spend requires evidence that State decisions about the level of service provision are affected by the availability of non-State services. Other considerations, including eligibility for State services and income constraints limiting access to non-State services, need to be evaluated. The relevant considerations will be different for each service area.

10 In addition to deciding the substitutability level for each component, the appropriate indicators to measure non-State activity need to be chosen. In the 2015 Review, the Commission generally chose a single indicator for each component. It is possible that more than one indicator could be used, weighted according to the proportion of State spending affected by each indicator.

11 The following section examines the levels of substitutability and the appropriate indicator for each component.

ANALYSIS BY COMPONENT

Admitted patient services

Conceptual case

12 Staff consider there is a strong conceptual case that some admitted patient services provided in the non-State sector influence the number of similar services that need to be provided in the State sector. For example, the availability of private childbirth services would affect the level of State service provision. However, there are many admitted patient services that would not be regarded as substitutable, including most emergency procedures and expensive surgical procedures for uninsured patients.

2015 Review method and State views

13 In the 2015 Review, the Commission considered a range of factors to estimate of the proportion of State admitted patient services that are substitutable. The main factors included the differences in the type of admitted patient activity in each sector and the level of private health insurance with hospital coverage.

14 Based on these two factors, the Commission estimated the potential substitutability for admitted patient services was 28%.

- About 40% of public admitted patient separations were emergency-type services which were generally not provided by private hospitals. Therefore, only 60% of all public admitted patient services were regarded as substitutable.
- At the national level, the proportion of people with private health insurance hospital cover was 47%. A person without private health insurance will rarely attend a private hospital, regardless of the availability of private health services in their State.
- As such, the estimated level of potential substitutability was 60% × 47%=28%.

15 The level of 28% was considered an upper bound given other policy and non-policy influences, including:

- the extent to which State policies affect the availability, quality and use of private hospital services
- the extent to which privately insured patients utilise their private health insurance due to policy excesses and gaps charged by specialists.

16 The final level of substitutability adopted by the Commission was 15%. State views varied but most supported a low substitutability level.

Proposed method for the 2020 Review

17 ***Level of substitutability***. Staff consider the approach and factors considered in the 2015 Review remain appropriate for determining the extent to which non-State service provision affects the demand for similar admitted patient services in the State sector, and the data used to estimate the upper limit are reliable.

18 Since the 2015 Review, there has been little change in the proportion of Australians with private insurance hospital coverage (47% in 2015-16),[1] or the proportion of public admitted patient separations classified as emergency-type services (40% in 2015-16).[2]

19 In the absence of any further evidence suggesting changes in the substitutability, staff consider the substitutability level of 15% for admitted patients remains appropriate.

20 ***Indicator to measure non-State activity***. Staff consider that the most appropriate data reflecting non-State sector service provision for admitted patient services is the usage of private admitted patient services by privately insured patients.

21 There is still no single data source on private patient services at both national and State levels, so private patient separation data sourced from Australian Institute of Health and Welfare (AIHW) (measuring national usage) and Australian Prudential Regulation Authority (APRA) (measuring actual State use) remain most appropriate.

Emergency department services

Conceptual case

22 Similar to admitted patients, some State ED services can be provided by the non-State sector. Many of the less severe ED presentations can be managed and treated through GP clinics and nurse walk-in centres. Most States have policies to limit the use of ED services by promoting the use of alternative services including local GPs and after hours GP services, and by ensuring adequate GP services are available. In addition, some private hospitals provide ED services. In 2015-16, 36 private hospitals accounted for about 7% of total ED presentations.[3] However, private ED patients are charged an attendance fee, which is not claimable under Medicare or private health insurance. Based on the relatively low level of private ED services and high attendance fees, the level of substitutability between public and private ED services is considered low.

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1 APRA, Privately insured people with hospital treatment cover annual analysis by sex, age and States, 2016.

2 AIHW, Admitted patient care 2015-16: Australian hospital statistics, 2017.

3 AIHW, Emergency department care 2016-17: Australian hospital statistics, 2017.

23 Staff consider there is a strong conceptual case that the availability of GP services, especially bulk billed GP services influences the level of ED services provided by States.

2015 Review method and State views

24 In the 2015 Review, the level of substitutability for ED services was determined based on less severe and less complex ED presentations that could have been managed by a GP.

25 Based on staff research and views of the consultants, 15% was adopted as the level of substitutability for ED services. While the majority of States supported a substitutability level between 15% and 20%, the Northern Territory and the ACT suggested a higher level would be more appropriate.

Proposed method for the 2020 Review

26 ***Level of substitutability***. During the 2015 Review, one of the consultants advised that clinically derived methodologies, especially when these yield consistent results, should be preferred over the administrative approach (for example, AIHW method, see Box 1) or surveys based on patient perception (for example, ABS patient experience survey).[4]

27 There are a number of Australian studies, that have looked at the proportion of ED presentations that could have been managed by a GP (termed GP-type patients or low acuity patients [LAPs]), which provide an indication of the substitutability level (Table 2).

[4] Conceptual Review of the Commonwealth Grants Commission Methodology for Health Assessment for the 2015 Review, James Downie, November 2014.

Table 2 Summary of studies about GP-type presentations

				Percentage of GP-type presentations (%)			
Study	State	Remoteness	Study year	ACEM	AIHW	Diagnosis	Sprivulis
Nagree et al.	WA	Major cities	2009-11	11-12	25-26	11.1	9-10
Allen et al.	Tas	Outer regional	2009-13	35.2	55.6	68.7	15.1
Stephens et al.	NSW	Major cities	2013-14	18.7	37.8	-	7.3
Stephens et al.	NSW	Inner regional	2013-14	30.8	50.7	-	11.8
Stephens et al.	NSW	Outer regional/ Remote/Very remote	2013-14	34.3	53.9	-	10.5

Source: Nagree et al., *Quantifying the proportion of general practice and low-acuity patients in the emergency department*, The Medical Journal of Australia, June 2013.
Stephens et al., *Patterns of low acuity patient presentations to emergency departments in New South Wales, Australia,* Emergency Medicine Australasia 29(3), June 2017.
Allen et al., *Low acuity and general practice-type presentations to emergency departments: A rural perspective*, Emergency Medicine Australasia, April 2015.

Box 1 Summary of methods used to calculate the number of GP-type presentations[5]

ACEM method: Any self-referred, non-ambulance patient with a medical consultation time < 1 hour. This method is developed by the Australasian College for Emergency Medicine (ACEM).

AIHW method: Any Australian Triage System (ATS) category 4 or 5 patient who does not arrive by ambulance, police, community health service vehicle or correctional vehicle, is not admitted to hospital, is not referred to another hospital and does not die. This method is developed by the AIHW.

Diagnosis method: ATS category 4 or 5 patients who self-refer, arrive by private transport, are not admitted and meet one of the listed diagnoses. This method is developed by Kevin Ratcliffe at the Tasmanian Department of Health and Human Services.

Sprivulis method: The difference between the discharge rate of GP-referred and self-referred patients, derived from the product of the difference in the discharge rates and the total number of self-referrals. This method was developed by Peter Sprivulis.[6]

28 All of the studies reported that the percentage of GP-type presentations increased with increasing remoteness, regardless of the method used. This is likely to be due to limited GP services in more remote areas. However, the studies did not show a

[5] Allen et al., *Low acuity and general practice-type presentations to emergency departments: A rural perspective*, Emergency Medicine Australasia, April 2015.

[6] Sprivulis, *Estimation of the general practice workload of a metropolitan teaching hospital emergency department*, Emergency Medicine, February 2003.

consistent pattern in GP-type presentations based on time of presentation (for example, business hours and after hours/weekends).

29 The studies also suggested that the AIHW method overestimated the proportion of GP-type presentations and indicated that the ACEM method was preferred for estimating GP-type presentations. Recently, the AIHW advised Commission staff that its method for calculating GP-type presentations is no longer used due to its methodological and data limitations.[7]

30 Using the proportions of GP-type presentations estimated by the ACEM method, and the number of ED presentations by remoteness, staff have estimated that 23% of total ED presentations would be considered GP-type presentations (Table 3).

Table 3 Estimation of percentage of GP-type ED presentations

	Total ED presentations	% of GP type presentations (a)	Number of GP-type presentations
Major cities	4 972 141	18	873 203
Inner regional	1 845 781	31	568 501
Outer regional/Remote/Very remote	1 378 851	35	477 038
Total	8 196 773	23	1 918 742

(a) Percentages are weighted by the study population.
Source: Staff calculation based on Table 2 and IHPA 2016-17 ED data.

31 It is also evident that GP-type presentations are less costly than more complex and severe ED presentations, mainly due to shorter treatment time. As a result, the proportion of expenditure on GP-type presentations would be lower than 23%. Staff consider that 15% remains an appropriate substitutability level.

32 ***Indicator to measure non-State activity***. Staff consider that the current indicator of benefits paid for bulk billed GPs remains the most appropriate data for calculating the non-State sector adjustment.[8] Bulk billed benefits paid was chosen by the Commission in the 2015 Review because this removed the income constraint faced by people.

Non-admitted patient services

Conceptual case

33 State provided non-admitted patient (NAP) services include a wide range of pre- and post-hospital and clinical treatments. The majority, if not all, of these services are also provided by the private sector. Pathology and diagnostic imaging services are also

[7] Commission staff discussions with AIHW staff in March 2018.

[8] Services provided by salaried doctors under the Council of Australian Governments (COAG) Section 19(2) are included in Medicare bulk billed GP data, and separating them from other Medicare data is unlikely to be practical.

widely provided by the private sector. Therefore, the potential substitutability would be high for these services.

34 However, the actual level of substitutability is affected by other factors.

- There are usually some patients' out-of-pocket costs for services that are provided in the private sector. Medicare provides a variety of subsidies to reduce the cost burden on patients but does not regulate the fees charged by private specialists. Out of pocket costs for private specialist services can be very high.
- Many NAP services are directly linked to admitted patient services provided in hospitals, which are less likely to be affected by NAP services provided by the private sector.

2015 Review method and State views

35 In the 2015 Review, the Commission estimated the substitutability level for NAP services using an approach where it disaggregated NAP services into broad groups, and for each group of services, it applied the bulk billing rate to the percentage of estimated spending. The total proportion based on expense weighted by the bulk billing rates was used as the indicator for the level of substitutability.

36 The estimated substitutability level of 40% was supported by most States.

Proposed method for the 2020 Review

37 ***Level of substitutability***. Staff consider the 2015 Review approach valid and have replicated it using the most recent available data to estimate the substitutable level for the 2020 Review.

38 NAP services are currently classified according to the type of clinic in which services are provided (i.e. Tier 2 classification). The clinics, in turn, are defined by the type of clinician providing the service, and the nature of the service provided. There are four classes of clinic types for non-admitted patient services:[9]

- procedures clinics, where services are provided by a surgeon or other medical specialist and account for 6% of total non-admitted patient services
- medical consultation clinics, where the services are provided by a general physician or medical specialists and account for 47% of total non-admitted patient services
- diagnostic clinics, where diagnostic services are provided within a specific field of medicine or condition and account for 1% of total non-admitted patient services[10]

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9 IHPA, 2018, National Hospital Cost Data Collection Cost report: Round 20 Financial Year 2015-16, Table 20.

10 For ABF purposes, diagnostic services are not reported separately and are incorporated as part of the cost by the requesting specialist events.

- allied health clinics, where services are provided by an allied health professional or clinical nurse specialist and account for 46% of total non-admitted patient services.

39 The average expenditure varies from $207 for services provided in allied health clinics to $591 for those provided in procedure clinics.

40 Based on activity data and average expenditure, the proportions of State expenditure for each group of NAP services are estimated in Table 4.

Table 4 Estimation of State expenditure for each group of NAP services

Group of services	Share of activity	Average expenditure	Estimated share of expenditure (a)
	%	$	%
Procedure clinics	6	591	12
Medical consultation clinics	47	355	55
Diagnostic clinics	1	388	1
Allied health clinics	46	207	31

(a) For each group of services, its share of expenditure is estimated as:

$$\frac{\%\text{activity} \times \text{average expenditure}}{\sum \%\text{activity} \times \text{average expenditure}}$$

Source: Staff calculation based on data from AIHW, 2017, Non-admitted patient care 2015-16, Table 2.3, and IHPA, 2018, National Hospital Cost Data Collection Cost report: Round 20 Financial Year 2015-16, Table 20.

41 For services provided in each type of clinic, the level of substitutability can be estimated as follows.

- Procedure clinics: almost all the services can be provided by private surgeons or specialists. We consider that the bulk billing rate for operational consultations[11] of 42% (Attachment B1) represents the level of comparable services provided in a private setting considering the relatively high out of pocket costs for some specialist services.
- Medical consultation clinics: similar to procedure clinics, most of the services can be provided by private specialists. The bulk billing rate of 31% (Attachment B1) for specialist attendances can be used as an indicator of the substitutability level.
- Diagnostic clinics: the private sector provides diagnostic pathology and imaging services, with relatively high bulk billing rates (pathology: 88%, imaging: 77%) (Attachment B1). However, majority of diagnostic services are bundled with a specialist consultation. Therefore, staff consider that the level of substitutability for diagnostic services would be around the bulk billing rate for specialist attendance (31%).
- Allied health services: although all State-provided allied health services are also available in the private sector, most State provided services are tend to be linked to an earlier admitted patient episode. In addition, only a very limited number of

[11] That is, 'total operations and assistance at operations' in Attachment B1.

patients who meet specific eligibility requirements (for example, those with a chronic medical condition or with an assessed mental disorder) are eligible for Medicare allied health items. Staff thus consider States provided allied health services are not substitutable.

42 Based on the above information, staff estimated the level of substitutability for NAP services would be 20-25% (Table 5).

Table 5 Estimation of substitutability level for NAP services

Group of services	Share of expenditure (a)	Estimated substitutability level	Expenditure-weighted substitutability level
	%	%	%
Procedure clinics	12	42	5
Medical consultation clinics	55	31	17
Diagnostic clinics	1	31	0
Allied health clinics	31	0	0
Total	100		≈22

(a) Estimation from Table 4.
Source: Staff calculation based on Table 4.

43 ***Indicator to measure non-State sector service usage.*** Similar to the argument for EDs, basing the assessment on bulk billed benefits paid for NAP services provided in the private sector removes the income constraint and is closer to the concept that the Commission wants to measure. In the 2015 Review, the value of bulk billed specialist, pathology and imaging benefits paid was used as the indicator.

44 As mentioned in paragraph 41, diagnostic services, including pathology and imaging services, are generally bundled with specialist consultations, and its user profile would not accurately reflect the use of private NAP services.

45 As majority of substitutable private NAP services are provided by private surgeons and specialists, as shown in Table 5, staff consider that the most appropriate assessment would be based on the value of bulk billed operations and specialist services.

Community health services

Conceptual case

46 States provide a wide range of community health services, along with public health services, many of which are also provided by GPs or other private clinicians. Staff consider there is strong evidence of substitutability between State-provided community and public health services and those provided by GPs or other private clinicians.

47 However, due to the heterogeneous nature of community health services, it has been challenging to determine to what extent non-State sector service provision influences the level of services provided by the State sector.

2015 Review method and State views

48 For the 2015 Review, the Commission initially considered 50% as the substitutability level. However, some States and the consultants suggested a higher level would be more reasonable. In the absence of further information, the Commission chose 70% as the estimated level of substitutability.

Proposed method for the 2020 Review

49 ***Level of substitutability***. During the 2015 Review, one of the consultants suggested investigating the level of substitutability for each area of community and public health services separately to obtain a more accurate figure. Due to the heterogeneity of community health services, staff consider this a sensible approach.

50 Although there are still no national administrative data on community health services, more recent studies (for example, the BEACH[12] study) provide information that enables us to assess the substitutability level on a micro basis.

51 For the 2020 Review, the approach staff have adopted is as follows.

- Step 1: assessing the level of substitutability for each area of service by evaluating
  - the range of services provided by the State and non-State sectors
  - accessibility and cost of services provided by the State and non-State sectors.
- Step 2: estimating the expense weight for each area of service.
- Step 3: combining substitutability (from step 1) and expense weights (from step 2) for each area of service and summing these to obtain an estimate of the total proportion of substitutable services.

52 Table 6 summarises the main findings from step 1. The level of substitutability has been classified as being very low (0-20%), low (21-40%), medium (41-60%), high (61-80%) or very high (81-100%). If the State and non-State sectors provide a similar range of services, and accessibility and costs are comparable, the potential substitutability would be high/very high. On the other hand, if State and non-State sectors provide different services, with different accessibility and/or costs, the potential substitutability would be lower.

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12 Bettering the Evaluation and Care of Health (BEACH) is a University of Sydney program that analysed data collected by General Practitioners (GPs) and reported information about GP-patient encounters from clinical practices across Australia (http://sydney.edu.au/medicine/fmrc/beach/).

53 High bulk billing rate for non-State sector services is one indicator of cost comparability, particularly for specialist services (Attachment B1).

Table 6 Analysis on substitutability level for community health services

	Services provided	Accessibility/cost comparability	Summary and estimated substitutability range
Community health centre services			
Alcohol and other drug services	State provided services include assessment, counselling, withdrawal management and support, information and education and rehabilitation. Similar services are provided by GPs and other private practitioners.	State services have no restriction on access and are provided free. Non-State services have no restrictions on access, and 70% of them are bulk billed. (Attachment B2).	Medium substitutability (41-60%) State and non-State sectors provide similar services, with similar accessibility, but Sates services target more complex cases. Non-State sector services may incur a fee.
Public dental services	State provided services include general and emergency dental services, denture services and special dental care. Similar services are provided by private dentists.	Access to State services is limited to children and concession card holders, accounting for 35% of the total population. Non-State dental services have no restrictions on access but usually incur high costs, so people eligible for public dental services are less likely to use non-State sector services (b).	Low substitutability (21-40%) All services provided in the State sector are also provided in the non-State sector, but the two sectors have different accessibility and costs resulting in different patient profiles.
Community mental health services	The State and non-State sectors provide general mental health assessment, intervention, facilitating admission and case management and counselling. Community residential/forensic mental services are mainly provided by the State sector. Non-State services are provided by GPs, private psychologists and psychiatrists but focus on less severe disorders.	Access to State services may require a referral but services are provided free. No restriction on access to non-State services but costs are incurred except if bulk billed (about 49% are bulk-billed (see Attachment B3). The cost for specialist visits may be partially covered by Medicare to a maximum of ten visits per year.	Low substitutability (21-40%) Most services provided in the State sector are also provided in the non-State sector but with a different focus. There are similar accessibility and cost if bulk-billed.

	Services provided	Accessibility/cost comparability	Summary and estimated substitutability range
Other community health centre services	State sector provides services including family and child health, community nursing services, chronic disease management, and a limited range of allied health services. Non-State sector (mainly GPs (a) and other private practitioners) provide similar services.	Most State-provided services have no restrictions on access (a referral may be required) and are provided free. Non-State services have no restrictions on access and many services are bulk billed.	Very high substitutability (81-100%) All services provided in the State sector are also provided in the non-State sector. There are similar accessibility and cost if non-State sector services are bulk billed.
Public health services			
Organised immunisation	Immunisation services can be provided by State and non-State sectors (mainly by GPs). State sector is responsible for coordinating/implementing the National Immunisation Program (NIP) Schedule.	There is no restriction on access for both sectors. For non-State sector services, immunisation is free but there may be a fee for consultation.	High substitutability (61-80%) The two sectors have similar accessibility and costs if non-State services are bulk billed. States' role in coordinating and data reporting is not substitutable.
Population cancer screening	State is the main provider of breast cancer screening, while cervical cancer screening is provided in State and non-State sector. In addition, States are responsible for policy regulation, data reporting and overall coordination	For eligible people, there is no restriction in both sectors. The screening services are free for eligible people, but there may be a fee for private consultation.	Medium substitutability (41-60%) Although the State is the main service provider, non-State sector also provides some cancer screening services, with similar costs if bulk billed. States' role in coordinating and data reporting is not substitutable.
Health promotion	Health promotion services are mainly provided by the State sector, including activities that foster healthy life styles and address health risk factors. GPs and private specialists also provide some services related to health promotion.	Public good provided to the entire population at no cost. Some promotions may target particular groups.	Very low substitutability (0-20%) Health promotion is mainly States' responsibility with some complementary services provided by the not for profit sector but these tend to operate nationally.

	Services provided	Accessibility/cost comparability	Summary and estimated substitutability range
Communicable disease control	Services are only provided by the State sector, including regulation, administration of communicable disease control programs, as well as management of outbreaks.	Not applicable as services are mainly only provided in the State sector.	Not substitutable Services are only provided in the State sector
Environmental health	Most environmental health services are only provided by the State sector, including environmental health protection education, and development of standards and regulation.	Not applicable as services are mainly only provided in the State sector	Not substitutable Nearly all the services are only provided in the State sector
Other public health services	These are the residual services that cannot be classified elsewhere.		In the absence of further evidence, the substitutability is estimated to be very low (0-20%.

(a) Britt, H et al (2015), General practice activity in Australia 2014-15, General practice series no. 38. Sydney: Sydney University Press.
(b) AIHW: Chrisopoulos S, et al (2016), Oral health and dental care in Australia: key facts and figures 2015, cat. no. DEN 229.
Source: CGC, 2016-13-S What States Do – Community health.

54 Table 7 summarises the substitutability levels (step 1) and expense weights (step 2) for each group of services. In the absence of more detailed information, the substitutability levels are presented in ranges and the midpoints are used to calculate the overall level.

55 The estimated range of substitutability for total community health services was 60%-70%, which encompasses the level adopted in the 2015 Review (70%).

Table 7 Estimation of substitutability level for community health services

Group of services	Substitutability range	Share of expenditure (a)	Expenditure weighted substitutability
	%	%	%
Community health services			
Public dental services	Low (21-40)	4.6	≈1
Alcohol and other drug services	Medium (41-60)	3.9	≈2
Community mental health services	Low (21-40	18.8	≈6
Other community health services	Very high (81-100)	53.7	≈48
Public health services			
Cancer screening	Medium (41-60)	3.1	≈2
Organised immunisation	High (61-80)	4.2	≈3
Health promotion	Very low (0-20)	4.9	≈1
Communicable disease control	Nil	3.2	≈0
Environmental health	Nil	1.3	≈0
Other public health services	Very low (0-20)	2.3	≈0
Total		100.0	60-70

(a) The average proportion for 2014-15 and 2015-16.
Source: Staff calculation based on Table 6 and special request of AIHW expenditure data.

56 ***Indicator to measure non-State sector service usage.*** Most community health services are provided by GPs, therefore, it remains appropriate to base the assessment on bulk billed benefits paid for GP services.

57 ***Discount.*** There is still a lack of data on State-provided community health services and whether clients have similar SDC profile with people using GP services. Therefore, some form of discount might be appropriate and staff will be investigating the appropriate level. In the meantime, a medium discount of 25% will be used as a placeholder.

SUMMARY

58 In conclusion, staff consider that the approaches adopted in the 2015 Review to measure the impact of the non-State sector in each Health component are still appropriate.

59 The levels of substitutability and the indicators to measure non-State sector services have been reviewed and changes are only proposed for the NAP component. The updated substitutability levels and indicators are summarised in Table 8.

Table 8 Proposed substitutability levels and indicators for the 2020 Review

	Substitutability		Indicator	
	R2015	R2020	R2015	R2020
Admitted patients	15%	15%	private patient separations	private patient separations
Emergency department	15%	15%	bulk billed GP services	bulk billed GP services
Non-admitted patients	40%	20-25%	bulk billed specialist and diagnostic services	bulk billed operations and specialist services
Community health	70%	60-70%	bulk billed GP services	bulk billed GP services (25% discount applies)

Source: Staff calculation.

Information and comments sought from States

We seek State comments on:

- the overall approach
- the substitutability level for each health component
- the indicators to measure non-State service usage.

If States do not agree with the proposed levels of substitutability and/or the indicators, we would appreciate further suggestions on alternative approaches, and/or more suitable indicators.

This paper is not seeking comments on the choice of assessment method (i.e. direct or subtraction approach).

NEXT STEPS

60 Once State comments have been received in October, staff will consider refining the levels of substitutability accordingly.

61 Staff will prepare a paper for the Commission reporting State views on those estimates and recommending revised substitutability levels and indicators.

62 The substitutability levels and indicators adopted by the Commission will be presented in the draft report. States will have further opportunities to comment before the final report.

ATTACHMENT A

NON-STATE SECTOR ADJUSTMENT

The calculation of the non-State sector adjustment includes the following steps (using the admitted patients component as an example).

- Determine total State spending on substitutable admitted patient services.
- Assessed private patient services — calculate the level of private patient services each State would need based on the national profile of privately insured patients (by Indigenous status, remoteness, SES and age). The substitutable admitted patient expenses are then apportioned across States.
- Actual private patient services — obtain the actual level of privately insured patient services in each State. Apportion the substitutable admitted patient expenses based on these State proportions.
- Subtract the actual levels from the assessed levels. This determines the assessed impact of the private sector on admitted patient services for each State.

The calculation is outlined in Attachment A1. Attachment A2 shows how the non-State sector adjustment fits into the assessment.

Attachment A1 Non-State sector adjustment, admitted patients, 2016-17

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Substitutable expense (15% x $38 billion)									5 724
Assessed expenses	1 867	1 512	1 087	604	408	110	115	22	5 724
Actual expenses	1 850	1 443	1 208	574	417	130	77	25	5 724
Non-State sector adjustment	17	69	-121	30	-10	-20	38	-3	0

Source: Commission calculation, 2018 Update.

Attachment A2 Assessed expenditure, admitted patients, 2016-17

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
SDC assessment	12 146	9 332	7 811	3 915	2 916	988	498	557	38 163
Non-State sector adjustment	17	69	-121	30	-10	-20	38	-3	0
Assessed State expenditure	12 163	9 401	7 690	3 945	2 906	968	536	554	38 163

Notes: Wages cost factors have not been applied.
Source: Commission calculation, 2018 Update.

ATTACHMENT B

Attachment B1 Medicare summary statistics by broad type of service

	Bulk billed rate		Patient contribution per service	
	2015-16	2016-17	2015-16	2016-17
	%	%	$	$
Total Medicare	78.2	78.3	58	61
Total non-referred attendances (excl practice nurse Items)	85.1	85.7	34	36
Non-referred attendances - GP/VR GP	83.7	84.3	33	35
Non-referred attendances - enhanced primary care	97.4	97.5	35	37
Non-referred attendances - Other	90.0	90.2	67	71
Total non-referred attendances (incl practice nurse Items)	85.3	85.9	34	36
Non-referred attendances - practice nurse Items	99.5	99.5	2	4
Specialist attendances	30.2	30.7	71	75
Obstetrics	53.1	55.5	251	265
Anaesthetics	10.1	10.3	137	140
Pathology	88.4	87.8	25	24
Diagnostic imaging	77.3	77.4	97	97
Total operations and assistance at operations	42.2	42.3	81	85
Optometry	93.8	94.1	23	25
Radiotherapy and therapeutic nuclear medicine	69.9	73.0	42	45
Allied health	63.4	63.5	40	43
Other MBS services	57.7	58.7	110	111

Source: Department of Health, Annual Medicare Statistics, 2016-17 Table 1.1.

Attachment B2 Alcohol and other drug treatment services, 2015-16

	Share of clients	Bulk bill rate (a)
	%	%
Counselling	39.4	58
Withdrawal management	8.3	84
Assessment only	16.1	84
Support and case management only	12.6	84
Rehabilitation	4.4	0
Pharmacotherapy	3.0	84
Information and education only	12.1	84
Other	4.2	84
Total	100.0	70

(a) The GP bulk bill rate was assigned to nearly all treatment types. For counselling we assumed 50% specialists and 50% GPs. Rehabilitation is assumed to be not substitutable.

Sources: Attachment A1; AIHW Alcohol and other drug treatment services in Australia 2015-16, cat.no. HSE 187.

Attachment B3 Medicare-subsidised mental health services, 2016-17

	No. of services	Bulk bill rate
	mil	%
General practitioners	3.5	84
Clinical psychiatrists	2.4	31
Clinical psychologists	4.9	31
Allied health providers	0.4	64
Total	11.2	49

Source: Attachment B1; AIHW Medicare-subsidised mental health specific services, 2016-17.