Socio-economic status

Overview

- On 21 June 2023, the Commission issued a <u>consultation paper</u> on the socio-economic status assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.
- 2 The Commission proposed changes to the 2020 Review assessment method.
- A summary of state responses to the consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.
- 4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that an annual Person Level Integrated Data Asset-based measure of socio-economic status for non-Indigenous people has the potential for a more contemporaneous assessment?¹

State views

- New South Wales and the ACT supported the investigation of an annual measure. New South Wales suggested that other variables, particularly housing stress, should be considered.
- Queensland said that Socio-Economic Indexes for Areas (SEIFA) is the more accurate measure as at census time, but that it could be updated annually with the Person Level Integrated Data Asset (PLIDA). While Queensland said the dataset is not yet fit for this purpose, it supported ongoing work to identify its suitability in the future. Western Australia supported an annual measure in principle but had concerns about the proposed approach. It also proposed that any new measure be tested against the current measure and different results explained. Like Queensland, it saw potential in updating the current measure using this dataset.

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¹ The Multi Agency Data Integration Project (MADIP) formally changed its name to the Person Level Integrated Data Asset (PLIDA) in August 2023.

- South Australia emphasised the need for rigorous testing of the measure and was awaiting the outcome of such testing. It was particularly cautious about potential volatility.
- 8 Tasmania was not convinced that PLIDA was a better measure of socio-economic status than the current measure.
- 9 Victoria and the Northern Territory had strong concerns about the proposed approach.
- All states supported working with the Commission on any further analysis. Specific feedback highlighted the following concerns.

Reliability

- Victoria questioned the accuracy of the proposed approach. It also raised concerns about coverage, particularly the lack of indicators relating to the labour market or human capital, and the weight given to medical indicators. Victoria questioned the usefulness of including a high-income variable. It was also concerned that state policies could affect the measure.
- Queensland said that this dataset was not designed to be used for the purpose being proposed by the Commission. It was particularly concerned with the use of medical proxies, noting that service use could undercount disadvantaged people, particularly in regional and remote areas.
- Western Australia noted that using only 3 indicators could lead to less reliability. It also noted that the mix of advantage and disadvantage indicators could result in fly-in-fly-out workers reducing a region's socio-economic status profile, even though their use of services is more like that of people with low socio-economic status.
- Tasmania was concerned with the small number of indicators proposed. It said this might oversimplify a complex area where needs should be tailored to each assessment.
- The Northern Territory agreed with Western Australia that a measure of advantage (as opposed to disadvantage) may not reflect drivers of state service use. It was also concerned that the proposed income support and health indicators could underestimate disadvantage in remote areas, where:
 - mutual obligation compliance is more difficult and is often required for access to income support
 - access to diagnosis and prescriptions is more difficult.
- 16 On the high-income indicator, the Northern Territory noted:
 - it would not illuminate differing degrees of disadvantage at the low end
 - it would treat younger, highly taxed workers as more advantaged than older, concessionally taxed retirees or landlords, and would not take account of high levels of wealth
 - it would not accurately measure the circumstances of regions with large agricultural sectors, which experience volatility in incomes.

Simplicity

- 17 Victoria noted the proposed approach could increase inconsistency between measures of Indigenous and non-Indigenous disadvantage.
- Queensland noted a need to test any new measure against the Non-Indigenous Socio-Economic Indexes for Areas and to standardise and rescale to this every 5 years.

Stability

19 Victoria, Western Australia, South Australia and Tasmania noted a possible trade-off between contemporaneity and stability. Western Australia cited the potential volatility impact of using only 3 indicators. South Australia noted the benefits of stability in assessments.

Commission response

- The Commission considers there is the potential for material improvements to its assessments from using PLIDA data, particularly with respect to contemporaneity. However, recognising the scale of the change, the Commission proposes to work through the issues highlighted by the states and consult further following the 2025 Review. This work would inform consideration of a possible change in the measure of socio-economic status for non-Indigenous people in a future review.
- 21 Attachment A contains some high-level comments on the concerns raised by states.

Commission draft position

The Commission proposes no change to the measure of socio-economic status for the non-Indigenous population in the 2025 Review. It proposes to undertake further work in consultation with the states following the 2025 Review to inform consideration of a possible change in a future review.

Other issues raised by states

Lack of granularity in measuring socio-economic status for First Nations people

- The Northern Territory raised concerns about the Commission's use of quartiles and quintiles in classifying populations, saying this understates its level of disadvantage. It showed that the Northern Territory's First Nations populations tend to cluster at the lower end of each band, and that existing assessment methods do not adequately account for this.
- The Northern Territory noted that, in remote areas, the Commission does not necessarily disaggregate by socio-economic status. It considers that this further understates its level of disadvantage.

Commission response

- The Commission aims to disaggregate as far as it can, having regard to the reliability of the relevant data. There is a trade-off between having a large enough population to produce a reliable estimate of national spending on each population group and having a small enough population with the granularity to measure differences between heterogenous groups.
- The Commission generally aims to have the greatest level of disaggregation that can support a reliable pattern of state spending. For example, where disaggregated data indicate that the middle quintile has higher use rates than a lower quintile, against the general trend across the 5 quintiles, the Commission will group quintiles together. This reflects 3 considerations:
 - estimates based on small samples can be volatile
 - some geographic data are aggregated from Statistical Area Level 2 or postcodes, and do not perfectly align with population data aggregated from Statistical Area Level 1
 - the measure of socio-economic status may not be an accurate proxy for the underlying concept that drives differential use.
- The Commission retests each assessment in each review to ensure it uses the most granular data possible. For example, in this review the Commission proposes to adopt decile level data for socio-educational advantage among school students. This is described in the schools chapter.

Commission draft position

Consistent with its approach in the 2020 Review, the Commission proposes to use socio-economic status for First Nations and non-Indigenous people in as much detail as can be supported by the data. Where patterns of cost and use are inconsistent with the conceptual case upon which they are based, the Commission proposes to aggregate data, or not differentially assess socio-economic status.

Review of Indigenous Relative Socioeconomic Outcomes index

The Northern Territory noted that this index has not been reviewed since its construction in 2001. Given the significant non-demographic growth in the First Nations population in the period since, it suggested that the Commission should review the index's relevance. It noted that this might occur after the 2025 Review has been finalised.

Commission response

The Commission agrees that this index warrants review. There are constraints on the Commission's ability to conduct such a review, as it needs to involve partnership with First Nations researchers. The Commission proposes to work with states after the 2025 Review to progress such a review.

Commission draft position

The Commission proposes to work with states to initiate a review of the Indigenous Relative Socioeconomic Outcomes index after the completion of the 2025 Review.

Draft 2025 Review assessment method

- Following consideration of state views, the Commission proposes to retain the 2020 Review measures of socio-economic status for First Nations people and non-Indigenous people.
- Following the 2025 Review, the Commission proposes to work with states to identify if measures of First Nations and non-Indigenous socio-economic status can be developed that better meets the needs of the Commission than its current approach.

Indicative distribution impacts

34 No method changes are proposed for this assessment. Changes to categories using this measure of socio-economic status are included in the indicative distribution impacts in relevant chapters.

Attachment A: Commission response to state views

35 The Commission proposes to continue to use the census-based non-Indigenous SEIFA. However, after the completion of the 2025 Review, the Commission proposes to engage with states on the potential for an alternative measure of socio-economic status. In anticipation of this process, the Commission has responded to state concerns on the model flagged in the consultation paper.

Reliability

- This was the main concern raised by states. The Commission agrees that reliability would be a pre-requisite for proceeding with a new approach.
- 37 The Commission's PLIDA-based measure outlined in the consultation paper has only 3 variables, compared with 15 in SEIFA, which could reduce reliability of the new measure. However, if these, or other PLIDA indicators demonstrate a stronger link to the use of services than the census indicators, the new measure could be more reliable, even using fewer indicators.
- 38 Some of the census-based measures offer relatively little explanatory power. Many of the census indicators are based on very small numbers of people. For example, there are around 170,000 people with no educational attainment (less than 3 in an average Statistical Area Level 1 [SA1]). Of the 15 variables used in SEIFA, only 3 have counts of more than 20 in an average SA1. The PLIDA indicators tend to be based on more prevalent attributes and be less subject to small volatile numbers. Therefore, while the number of included variables would be lower under PLIDA, this does not necessarily mean a less robust or reliable measure.
- 39 Because people on high incomes use services less than people on middle incomes, there may be merit in considering using a high-income measure in an indicator to predict state service use. This could be done in addition to measuring the prevalence of disadvantage, potentially by considering access to social security payments. SEIFA can also measure advantage. The SEIFA Index of Relative Socio-Economic Disadvantage and Index of Relative Socio-Economic Advantage and Disadvantage would both be benchmarks upon which to test PLIDA based models.
- In terms of identifying the disadvantaged (as opposed to people with a low income but high wealth), neither PLIDA nor census measures directly reflect wealth. However, the PLIDA indicators may indirectly identify low-income people with high wealth, for example people on a low income who do not qualify for social security payments. The relevant census income question currently identifies such people as low income.
- There are also some low-income people who do not receive social security payments because of mutual obligation requirements. Such people are also likely under-represented in the census. In developing a PLIDA based measure, the

- Commission will investigate both these sources of bias and consider approaches to minimising them.
- 42 Queensland's concern that some PLIDA indicators can reflect different levels of disadvantage in different regions is valid. However, this concern also applies to census indicators. In both circumstances, it is resolved by the Commission's practice of cross-classifying socio-economic status by remoteness region. This means that state spending on disadvantaged people in major cities would be allocated between states based on their share of disadvantaged people in major cities. Similarly, state spending on disadvantaged people in remote areas would be allocated between states based on their share of this group. The Commission's allocation of GST is not generally affected by differences in the practical definition of disadvantage between major cities and remote areas. It would only be a concern if there were differences in the level of medical diagnoses between similar remoteness regions in different states.
- 43 Some PLIDA and census-based approaches can reflect different levels of disadvantage in different regions. For example, census indicators of carless households, and low-income households reflect different circumstances depending on the quality of public transport and the cost of living in different regions. Similarly, PLIDA indicators such as the propensity to be diagnosed with specific conditions can reflect differential access to health services. Using socio-economic status cross classified by remoteness, as the Commission does, should minimise the effect of this. A person's socio-economic status would effectively only be compared with that of other people in the same remoteness region.

Simplicity

- Changing the socio-economic indicator for the non-Indigenous population, but not the First Nations population, would mean that these measures of socio-economic status would differ. The Commission is initially exploring the proposed change in approach for the non-Indigenous population but if this proved successful, it would examine the potential to change the First Nations measure.
- At a minimum, the proposed approach would need to be more reliable than the current approach in non-census years. If a PLIDA measure could be found that reflects socio-economic status as well or better than the census in census years, 5-yearly benchmarking would be unnecessary.

Stability

- The Commission recognises the importance of stability, although only updating data every 5 years can result in large revisions at that point. If the census year is not representative of medium-term average levels of socio-economic status, it can create considerable bias. The level of volatility in the PLIDA methods will be a factor in determining suitability.
- 47 Early work suggested that a PLIDA based approach may better reflect changes in socio-economic status between censuses, but at census times SEIFA may be

superior. If this conclusion is maintained, there may be merit using a SEIFA measure every 5 years, updated annually with a PLIDA measure. However, if a PLIDA-based measure can be developed that reflects the drivers of state service use better than a census-based measure, the preferred approach may be to use only the PLIDA-based measure. The relationship between a PLIDA-based model and a census-based model will be examined and considered in detail.