

NDIS Annual Financial Sustainability Report 2020-21

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Summary

For the first time, the annual NDIS Financial Sustainability Report, prepared by the NDIS Scheme Actuary, has been publicly released. This new transparency from the National Disability Insurance Agency is very welcome.

The projections of NDIS costs to 2029-30 make sobering reading.

Year	Participants	Total Payments (\$ million)
2020-21	466,619	23,347
2024-25	670,400	41,373
2029-30	859,329	59,284

Key matters for discussion arising from the Report include:

1. The sharp rise in the number of participants aged 0-14

At 30 June 2021, 192,870 participants were aged 0-14, representing 42.9% of participants aged 0-64. This differs markedly from the 29.4% in the Productivity Commission's 2011 costings.

Exit rates are lower than expected. A large rise in participants aged 15-24 is projected in the years from 2025 (121,833) to 2030 (191,015); the proportion of all participants in this age range rises from 18.2% to 22.2%.

2. The dramatic impact of participants aged 65 and over

The number of participants aged 65 and over is projected to increase by 267.8%, from 16,581 (30 June 2021) to 60,987 (30 June 2030), compared to a 77.4% increase for participants aged 0-64. Over the same period, payments to participants aged 65 and over are projected to increase by 479.4% from \$1.2 billion to \$7.1 billion, compared to a 135.9% increase for participants aged 0-64.

The NDIS recommended by the Productivity Commission in 2011 covered people only up to age 64.

3. Projected payment growth for participants aged 0-64 is driven by participant numbers, not growth in real terms average payments.

The Report's payment projections are only shown in current year dollars. There are no real terms projections, using the dollars of a base year.

In fact, real terms comparisons in the paper show that projected real terms payment growth for participants aged 0-64 is driven by the growth in participant numbers, not growth in average payments. This should be a key driver of attention for NDIS policy review.

4. The continuing intake above expectations of new participants from regions where the NDIS has been in place for several years

Participant intake has not flattened out over time, despite the NDIS being in place in some areas since 2013. This underpins the projected ongoing increase in participant numbers up to 2030. There is no information on the payments going to these 'late' entrants compared to earlier entrants.

Conclusion

These matters highlight the need for more detailed analyses than is contained in the 2020-21 Annual Financial Sustainability Report, as a base for public policy discussions.

Note: An earlier version of the paper was discussed by the Actuaries Institute Retired Actuaries Group Australia on 4 November 2021. The comments from the Group have been very helpful.

Introduction

The National Disability Insurance Scheme (NDIS) was legislated by the Australian Parliament in 2013 (<https://www.legislation.gov.au/Details/C2016C00934>). The provisions of the Act largely followed the recommendations of a report by the Productivity Commission in 2011 (Productivity Commission 2011, Disability Care and Support, Report No. 54, Canberra): there is comment on areas of difference below.

The National Disability Insurance Scheme (NDIS) Act requires the Scheme Actuary, each time a National Disability Insurance Agency (NDIA) annual report is prepared, to prepare a Financial Sustainability report (NDIS Act, section 180B). In preparing this report, the Scheme Actuary must:

- a) assess
 - i. the financial sustainability of the NDIS,
 - ii. risks to that sustainability, and
 - iii. any trends in provision of supports to people with disability otherwise than through the NDIS,
- b) consider the causes of those risks and trends.
- c) make estimates of future expenditure of the NDIS.

A report of their assessment must be prepared, as well as a summary of the report.

Until 2020-21, only the summaries of the reports have been included in NDIA Annual Reports.

The 2019-20 Annual Report (<https://www.ndis.gov.au/about-us/publications/annual-report>, accessed 30 September 2021) includes the Summary of the Financial Sustainability Report 2019-2020 at P76-79. The Scheme Projections are summarised as follows:

The Scheme is projected to reach about 532,000 participants by 30 June 2023, of which almost 508,000 are expected to be aged 0 to 64. This is equivalent to a prevalence rate of 2.3 per cent of the projected Australian general population aged 0 to 64, slightly higher than last year's estimate and the original estimate by the 2011 Productivity Commission (2.1 per cent). The increase in prevalence from the previous report reflects the continued high levels of participant intake seen in the past year, particularly for children in the more mature regions.

Scheme costs for all participants are projected to be about 1.3 per cent of Gross Domestic Product (GDP) for 2020-21, 1.4 per cent in 2022-23, and 1.7 per cent for 2029-30. This includes participants who remain in the Scheme past 65 years, noting that the Commonwealth has committed to funding these participants.

(Footnotes omitted).

No further detail on projections was included.

In July 2021, the NDIA released the NDIS Annual Financial Sustainability Report Summary- Interim Update July 2021.

[file:///C:/Users/rmadden/Downloads/PB%20NDIS%20AFSR%20Summary%2031%20Dec%202020%20PDF%20\(1\).pdf](file:///C:/Users/rmadden/Downloads/PB%20NDIS%20AFSR%20Summary%2031%20Dec%202020%20PDF%20(1).pdf)

The Interim Update contained significant detail on updated projections for the NDIS in the period 2021-22 to 2029-30.

On 13 August 2021, Disability Reform Ministers agreed to a more open process for Financial Sustainability reports in the future (Disability Reform Ministers communique, 13 August 2021, <https://www.dss.gov.au/disability-and-carers-programs-services-government-international-disability-reform-council/communique-13-august-2021>, accessed 3 October 2021).

Following on from their discussion on financial sustainability at their last meeting, Ministers directed further work be undertaken by officials to understand cost drivers and underpinning assumptions in the Annual Financial Sustainability Report (AFSR). Ministers agreed this would be informed by data and modelling underpinning historical and future AFSRs, noting the NDIA Board will in future release the full AFSR and Peer Review Actuary Report each year. Ministers agreed representatives of people with disability should be actively engaged in this work. Ministers agreed to direct officials to develop a forward work plan and an interim report back to Ministers in October 2021 and a more substantive report on findings in December 2021.

In October 2021, the NDIS Annual Financial Sustainability Report 2020-21 (AFSR 2020-21) was released by the NDIA.

([file:///C:/Users/rmadden/Downloads/PB%20NDIS%20AFSR%202020-21%20PDF 0.pdf](file:///C:/Users/rmadden/Downloads/PB%20NDIS%20AFSR%202020-21%20PDF%200.pdf)).

The accompanying media release of 8 October 2021

(<https://www.ndis.gov.au/news/6931-ndia-board-releases-annual-financial-sustainability-report>, accessed 11 October 2021) made the following points:

The release of the report reflects the Agency's commitment to NDIS participants, the disability sector and State and Territory governments to transparency in relation to the Scheme's financial trajectory.

In July this year, the Board released an interim AFSR which showed the Scheme's rapid growth.

Today we publish on our website the latest full report so participants, their families and carers and the wider disability sector have a comprehensive picture in relation to the NDIS's projected financial evolution.

The key AFSR projections include the following:

- 670,400 participants are estimated to be in the Scheme by end June 2025, and 859,300 by end June 2030.
- On an accrual basis, total participant costs are estimated to be \$29.2 billion in 2021-22, growing to \$41.4 billion in 2024-25, and \$59.3 billion in 2029-30.

The NDIS is growing at a rapid rate, with the numbers in this report being significantly higher than those estimated by the Productivity Commission in 2017

This report includes recommendations intended to assist with the Scheme's long-term sustainability, as required by the NDIS Act.

The 2020-21 Report projections indicate substantial increases in NDIS participant numbers over the coming 9 years. The underlying reasons for these substantial increases in participant numbers need to be examined in further detail than is included in the Report.

References are to the 2020-21 Report unless otherwise specified.

Annual Financial Sustainability Report 2020-21: Results, data and assumptions

The Report provides projections of participant numbers and expenditure estimates to 2024-25 and for 2029-30:

Table 1: Projections: Participants at 30 June

Year	Participants (30 June) ¹				
	Age 0-14	Age 15-64	Age 0-64	Age 65+	Total
2020-21	192,870	257,168	450,038	16,581	466,619
2021-22	222,274	286,700	508,974	21,483	530,457
2022-23	246,098	313,748	559,846	26,587	586,433
2023-24	262,728	335,762	598,490	31,835	630,327
2024-25	275,599	357,997	633,596	36,804	670,400
2029-30	315,719	482,623	798,342	60,987	859,329 ²
Increase from 2020-21 (%)	63.7%	87.7%	77.4%	267.8%	84.2%

Note: 1) AFSR 2020-21, Table 23

2) Stated as 859,328 in the AFSR 2020-21 Report

Table 2: Projections: Total Payments

Year	Total payments (\$M) ¹		
	Aged 0-64	Aged 65+	Total
2020-21	22,119 ³	1,228 ³	23,347 ²
2021-22	27,359	1,864	29,223
2022-23	31,386	2,501	33,886
2023-24	34,812	3,161	37,973
2024-25	37,569	3,803	41,373
2029-30	52,169	7,115	59,284
Increase from 2020-21 (%)	135.9%	479.4%	153.9%

Note: 1) AFSR 2020-21, Table 18, accrual basis

2) AFSR 2020-21, Figure 35

3) Not in AFSR 2020-21 ; source is Interim Update Table 1, adjusted to AFSR total

The projections depend on the modelling approach and the assumptions about the growth in participant numbers, average payments per participant and inflation.

1) The Modelling Approach

The modelling approach used to produce projections in the Report is described in Chapter 3 of the Report:

The modelling approach splits participants into cohorts based on characteristics which reflect expected differences in average payment, new entrant rates and/or exit rates between different groups of participants. The characteristics allowed for are:

- age
- primary disability type
- level of function
- gender
- whether a participant is in SIL arrangements
- duration that a participant has been in the Scheme.

Separate average payment, new entrant and exit assumptions have been developed for each of these cohorts.

The Interim report gave the following useful explanation:

Each Projection Group is differentiated by age band (summarised into nine groups), primary disability and level of function (57 groups), gender (two groups) and whether a participant is in SIL (two groups). This leads to 2,052 unique Projection Groups. (Note: SIL is Supported Independent Living, formerly known as group homes).

It would be helpful to know the number of participants currently in each of the 2,052 Projection groups, as well as the details of the 57 primary disability and level of function groups.

The modelling approach does not include the time between the date when the NDIS became available in the participant's area and the date the person became a participant. This will be discussed further below.

2) Number of Participants

The number of participants is projected to grow from 466,619 at 30 June 2021 to 859,328 at 30 June 2030 (Table 1 above).

The evidence provided in the Report for the projected continuing substantial growth in the number of participants up to 30 June 2030 is the continuing high incidence of new entrants in areas where the NDIS has been in place for several years (Figure 23 of the Report). One example is given (Report, P6):

The rate of new entrants to the Scheme continues to be high in geographical areas where the Scheme has been operating for several years. As an example, the rate of new entrants in geographical areas that commenced in 2013 is 341 per 100,000 people, which is approximately 93% higher than the (previously) assumed rate of 177 per 100,000.

(The July 2021 Interim Update contained the same example, but the rate quoted was 303 per 100,000, a 71% increase: the Report does not discuss this substantial change over a short period).

The following recommendation in the Report should be noted:

Recommendation 11: *The NDIA should undertake further detailed analysis to better understand the drivers of higher than expected new entrants, to increase confidence in long term assumed new incidence rates.*

It is surprising that such a recommendation is necessary. It would be expected that commissioning and undertaking such analyses would be part of the role of the Scheme Actuary in producing the annual Financial Sustainability Reports.

The NDIA would have detailed information on those who have become participants in these areas (notably Hunter in NSW, Barwon in Victoria) at various dates since 2013, and the characteristics of people now joining the NDIS in those areas. Given the significant role that this continuing flow of these 'late' new entrants plays in the projections, much more analysis and discussion is needed of the characteristics of the new participants and their likely support needs compared to earlier entrants.

In light of these ongoing rates of new participants in areas where the NDIS has been in place longest, explicit allowance for duration of the NDIS in the participant's area in the modelling approach for participant numbers needs to be considered (a similar comment applies to average payments: see below).

3) Average payments per participant

The 2020-21 AFSR states that average payments per participant were \$55,800 in 2020-21 (Table 26). From 2017-18 to 2020-21, average payments (in current dollars) have increased by 11.8% per annum.

Average payments increased with age (\$21,900 for ages 7-14, \$91,300 for ages 45-64) and also with duration in the NDIS, as utilisation of approved support packages increases.

The 2020-21 Report has recognised for the first time that new entrants to the NDIS have lower average payments per participant than existing participants, on a like for like basis. After an initial small scoping study, it is reported that entrants between 2016 and 2019 were analysed, to conclude:

The analysis indicated that the average payment for recent non-SIL new entrants is approximately 17% lower than the average payment for all participants after adjusting for age, disability type and level of function.

This statement is footnoted as follows:

This analysis includes Non-SIL participants for phasing financial years 2016-2019. The mix-adjusted average payment shows the average payment for each cohort on a comparable basis, i.e. based on a consistent mix of participants by age, disability type and level of function. The variance in average payment between all participants and recent entrants therefore relates purely to lower payments per participant, and not due to any change in mix.

There is no indication whether this conclusion applies to the subset of new entrants in areas where the NDIS is longest established, which has been discussed above.

It would be of great assistance if a complete analysis of average payments per participant could be done by duration since NDIS introduction, as well as by the other

variables already used (practical constraints around participant numbers in each cell would need to be considered).

4) Inflation

The Scheme Actuary is required to make estimates of future expenditure, and does this in current dollars, those of the year in question. The 2020-21 Report identifies two types of inflation, 'normal' (or economy wide) inflation and superimposed inflation.

Superimposed inflation is estimated to total 14.4% over 10 years (2020-21 report, P68).

Discussion

Transparency

As already mentioned, preparation of an annual Financial Sustainability report is a requirement of the NDIS Act. Until the 2020-21 Report, none of these reports have been made public. The Interim Update Summary was an important step forward, and the release of the 2020-21 report is welcomed.

A result of the lack of knowledge of previous Financial Sustainability Reports is that we do not know how the experience has changed in this Report, nor the impact of any changed assumptions. One example is available: the 2020 Financial Sustainability summary (quoted above from the 2019-20 Annual Report) says ‘Scheme costs for all participants are projected to be about 1.3 per cent of Gross Domestic Product (GDP) for 2020-21, 1.4 per cent in 2022-23, and 1.7 per cent for 2029-30.’ The 2020-21 Report states that 2029-30 percentage as 1.95 per cent (Table 18). There is no information to help the reader understand whether this substantial increase depends on changed experience over a year, changed assumptions or changed methodology.

The Disability Reform Ministers’ commitment to publish future Financial Sustainability reports, and release of the 2020-21 Report, are important steps forward, but the analyses underlying important assumptions also need to be published. Having these analyses in the public domain will stimulate critical debate about methods used, and also allow the wider community to debate alternative policies to respond to financial pressures on the NDIS. Uncritical re-use of the results shown in the Interim Update has occurred, as illustrated by the Parliamentary Budget Office’s Beyond the Budget 2021-21: Fiscal Outlook and Scenarios released on 21 September 2021 (report No. 02/2021, PBO, Canberra).

The Ministers have commissioned an independent review of the 2020-21 AFSR by an actuarial consulting firm. It is not known when the review will be finalised. It is important that the review be publicly released as quickly as possible.

Participants aged 0-14

Table 3: Projections: Participants and Total Payments for ages 0-14

Year	Participants (30 June) ¹	Total payments (\$M) ²
2020-21	192,870	NA
2021-22	222,274	4,318
2022-23	246,098	5,143
2023-24	262,728	5,850
2024-25	275,599	6,373
2029-30	315,719	8,183
Increase from 2020-21 (%)	63.7%	NA

Notes: 1) Table 1 above

2) AFSR 2020-21, Table 61, cash basis

The number of participants at 30 June 2021 aged 0-64 was 450,038 (Table 1). Of these, 192,870 were aged 0-14 (Table 3), representing 42.9% of participants aged 0-64. This differs markedly from the assumptions used by the Productivity Commission in its 2011 costings: Table 16.2 of that Report shows 120,960 participants aged 0-14 out of 411,250 aged 0-64, or 29.4%.

The number of participants aged 15-64 at 30 June 2021 was 257,168 (Table 1), which is below the Productivity Commission estimate of 290,290.

These disparities in participant numbers by age group from the 2011 estimates are striking, but they are not substantially discussed in the 2020-21 AFSR (the 2021-22 NDIS Quarterly Report discussed the number of participants aged 0-6; this number grew by 7,761 in that quarter alone to 74,840).

There is discussion of the much lower than expected non-mortality exit rates (2020-21 AFSR Executive Summary and Figure 24). The 2011 Productivity Commission projected number of participants aged 0-14 was based on the ABS Survey of Disability, Ageing and Carers (SDAC). This cross-sectional survey showed a much larger number of people with severe or profound disability at ages 5-14 relative to the ages 15-24 decile. However, it could be expected that if a person aged under 15 became an NDIS participant, they would be reluctant to exit given the security of current and,

importantly, future supports offered by the NDIS, so a lower than projected exit rate is not surprising. The statement at P9 and P59 of the 2020-21 Report demonstrates the significance of the sustainability projections for existing and future NDIS participants:

It continues to be assumed that rates of exit will increase as participants receive early intervention supports, and the NDIA focuses on ensuring participants continue to meet the access criteria (as per the NDIS Act).

Nevertheless, the projections show a large rise in participants aged 15-24 in the years from 2025 (121,833) to 2030 (191,015); the proportion of all participants in this age range rises from 18.2% to 22.2%. The Report comments:

Young adults represent a growing proportion of the Scheme's participant numbers as the children from the intake of prior projection years begin to age and transition into older age bands.

The fact that the number of people aged 0-14 is so much above the 2011 estimates, and that they are expected to lead to significant increases in the 15-24 age group, is a serious issue for the NDIS going forward.

The 2020-21 report contains a number of Recommendations about the future of the NDIS. Recommendation 9 is important here:

The NDIA should reassess eligibility for participants who entered through early intervention as part of the normal course of business, whilst providing reassurance to those who exit the Scheme that it will be available to them in the future should their circumstances change.

Impact of participants aged 65 and over

The NDIS cost estimates prepared by the Productivity Commission in 2011 did not include people aged 65 and over (see Productivity Commission 2011, Chapter 3). However the NDIS Act provided for participants who became participants before age 65 to remain in the NDIS after that age.

The 2020-21 Report projections separately identify the number of participants and the costs for people aged 65 and over. The State disability services systems which preceded the NDIS included relatively few people aged 65 and over. But the more generous provisions of the NDIS relative to the aged care system now give little incentive for NDIS participants to transfer to the aged care system when they reach the age of 65. Participant numbers and total costs are increasing far more quickly for people aged 65 and over than for people under the age of 65.

The number of participants aged 65 and over is projected to increase by 267.8% from 16,581 at 30 June 2021 to 60,987 at 30 June 2030 compared to a 77.4% increase for participants aged 0-64 (Table 1 above). Over the same period, payments to participants aged 65 and over are projected to increase from \$1.2 billion in 2020-21 to \$7.1 billion in 2029-30, a 479.4% increase compared to a 135.9% increase for participants aged 0-64 (Table 2).

The increasing impact of people aged 65 and over is largely independent of the current decisions of the NDIA, and reflects the relatively small numbers of people aged 65 and over receiving pre-NDIS disability supports (with growth being in part influenced by the ageing of the population). Discussion about reasons for, and possible policy changes in response to, increasing costs in the NDIS should consider participants aged 0-64 separately from those aged 65 and over.

Drift from the aged care system into the NDIS poses a serious threat to the NDIS. The need for separate consideration of participants after the age of 65 is made more urgent by the developing campaign about inequities for people aged 65 and over with a disability depending on whether the disability was acquired after age 65 (not eligible for the NDIS) relative to those who are NDIS participants.

Mix of participants

It was shown above that average payments for non-SIL recent entrants are 17% lower than for all participants, after controlling for age, disability type and level of function.

The Interim Report (P31) suggested that the level of function for participants tended to fall as their time as participants increased:

...for participants who had entered the Scheme prior to 31 March 2017, over time the proportion with a high level of function has decreased, and the proportion of participants with medium and low function has increased. This trend most likely reflects inconsistent information, and is a driver of increasing costs (as lower function drives higher support packages). This trend is also consistent for participants who entered in later years (post 2017).

However, there is no commentary on whether the level of function for new entrants is increasing or decreasing over time. It might be expected to be increasing if support needs payments (which are falling for new entrants) are a reflection of level of function (as reported above). This would be consistent with people with low function having sought NDIS supports as soon as possible after the NDIS became available to them (such a person may have been already receiving disability supports before the introduction of the NDIS, and could rapidly transfer to the NDIS).

The 'mix' of participants is discussed later in the Report, under the Inflation heading. At P65, the following is included:

Observed increases in average payment per participant (at an aggregate level) are also influenced by ongoing changes in the mix of participants. Specifically, new entrants to the scheme have lower impacts on functional capacity than existing participants. Taken in isolation this change will lead to a reduction in average payment per participant.

The (downward) projected changes in participant mix are shown in Table 4.

Table 4: Projected change in participant mix

	2021-22	2022-23	2023-24	2024-25		2029-30
Change in mix	-5.6%	-4.4%	-3.2%	-2.3%		-0.7%

Source: Table 30, 2020-21 AFSR

The Report includes the change in mix as part of superimposed inflation. However, as the change in mix can be modelled, it should be a specific element of the modelling process.

Real terms estimates

The use of nominal terms estimates, while appropriate for expenditure projections, may lead to inappropriate comparisons when analysing the development of the NDIS. The 2020-21 Report gives its estimates as a percentage of GDP to give a real terms comparator, but does not gives real terms expenditure estimates.

Comparing 2029-2030 expenditure to 2020-21 expenditure is only meaningful if done in real terms. Table 5 applies the 2020-21 AFSR's economic 'normal inflation' assumptions (Table 28) to projected NDIS costs for participants aged 0-64 to produce real terms estimates (2020-21 dollars).

Table 5 : Total NDIS participant costs aged 0-64: Nominal and Real (\$2020-21)

Year	Projected payments¹ (Nominal) (\$M)	Normal inflation² (e)	Cumulative normal inflation (E)	Deflator (1/1+E)	Projected payments (\$2020-21) (\$M)
2020-21	22,119	NA	NA	0	22,119
2021-22	27,359	0.030	0.030	0.971	25,566
2022-23	31,386	0.032	0.0630	0.941	29,534
2023-24	34,812	0.032	0.0970	0.912	31,749
2024-25	37,569	0.032	0.1321	0.883	33,173
2025-26	NA	0.032	0.1683	0.856	NA
2026-27	NA	0.032	0.2057	0.829	NA
2027-28	NA	0.032	0.2443	0.804	NA
2028-29	NA	0.032	0.2841	0.779	NA
2029-30	52,169	0.032	0.3252	0.755	39,388
Increase from 2020-21	135.9%				78.1%

Notes: 1) Table 2 above

2) 2020-21 Report Table 28

Table 5 shows that NDIS costs in 2020-21 are projected to increase by 78.1% over the 9 years from 2020-21 to 2029-30 (which is equivalent to an average real compound rate of 6.6%pa over the period).

This is a most interesting result: the number of participants aged 0-64 is projected to increase by 77.4% between 2020-21 and 2029-30 (Table 1), and payments for the same age group over the same period are projected to increase by 78.1% (Table 5). In other words, it is the growth in participant numbers that is driving the increase in expenditure, not growth in average payments per participant.

This result demonstrates the need for real terms projections, and for analysis based on them.

The health sector has put a lot of effort into the adjustments of expenditure estimates for price changes over time. A range of price deflators are applied to expenditure in different health sectors (Australian Institute of Health and Welfare, Health Expenditure Australia 2018-19, P55-57). The NDIA should investigate a similar approach, given the significant share of the economy now represented by the NDIS.

External sources of cost increases

The real terms estimates shown in Table 5 continue to include what the Report refers to as superimposed inflation. As well as change in mix already discussed, the projections include under superimposed inflation the expected increase in the rate of take up of support packages. This factor is an inherent part of the NDIS as participants become more aware of potential service providers and as the service provider market matures. The NDIA's database should enable this increase in take up to be modelled, so it should be part of the modelling process.

One external source of cost increases is outside the control of the NDIA, namely award wage increases, and is not discussed in the 2021-22 Report. NDIS costs up to now have been affected by the impact of the Social, Community, Home Care and Disability Services Industry Award 2010 (SCHADS Award). Prior to the NDIS, Governments had specifically funded the impact of the SCHADS Award which was, among other things, designed to increase the workforce providing disability supports. Such external impacts may occur in the future and are not subject to influence by the NDIA. So it would be misleading to include award variations with other sources of NDIS cost increases.

Overall, it would be preferable for NDIS cost projections to include known factors that impact on future NDIS payments in the modelling process. External factors such as community wide inflation and future award changes should be isolated, so that real terms estimates can be made and included along with projections of payments in current dollars.

Superimposed inflation should be restricted to cost increases specific to the NDIS, and potentially amenable to management by the NDIA.

Supports outside the NDIS for people with disability

Section 4(14) of the NDIS Act specifies

People with disability should be supported to receive supports outside the National Disability Insurance Scheme, and be assisted to coordinate these supports with the supports provided under the National Disability Insurance Scheme.

Section 31 provides that

The preparation, review and replacement of a participant's plan, and the management of the funding for supports under a participant's plan, should so far as reasonably practicable...

(e) consider the availability to the participant of informal support and other support services generally available to any person in the community

These provisions are in line with Article 19 of the UN Convention on the Rights of Persons with Disabilities.

The Productivity Commission had proposed in its 2011 report (Chapter 3.4) that Tier 2 of the NDIS should 'provide a referral service, so that people can more easily connect with appropriate services'.

As was pointed out in the Introduction, the NDIS Act requires the Scheme Actuary, in preparing a Financial Sustainability report, 'to assess any trends in provision of supports to people with disability otherwise than through the NDIS'. The 2020-21 AFSR contains no material on this part of the Financial Sustainability report's mandate.

Given the projected growth in participant numbers, this omission is important. Mainstream services such as health, education and aged care are budget limited, and under continual budget pressure in the face of high demand. It would be expected that those services will test out the willingness of the NDIS to provide support at their boundaries with the NDIS. Examples could include support for NDIS participants when attending a health service such as a GP surgery, dentist or allied health service, or even as a hospital in-patient; schools provide supports for people with significant disability but there may be pressure on the NDIS to support access to school or extra-curricular activities.

Hopefully future Financial Sustainability reports can give attention to the effectiveness of participants' plans in providing access to mainstream services, and the resulting financial implications for the NDIS.

Impact of Early Interventions and Specific Supports

Section 4(13)(c) provides that

Reasonable and necessary supports for people with disability should...

(c) develop and support the capacity of people with disability to undertake activities that enable them to participate in the mainstream community and in employment.

One of the aims of the NDIS was to provide supports to participants which will decrease their longer term need for supports. The Productivity Commission's 2011 Report (Productivity Commission 2011, Volume 2 Chapter 16, P779) argued

Early intervention by definition should result in cost-effective treatment which reduces costs in the long-term. Hence the \$650 million in early intervention will reduce care and support requirements over the long-term. It is estimated that this reduction would be approximately \$324 million

Packages need to be viewed longitudinally across a participant's life, importantly for the most beneficial package at each life stage to be put in place, and to quantify likely costs as closely as possible. Early interventions are a key element of the NDIS, and are a source of lower superimposed inflation over time.

The 2020-21 Report contains a projection of lifetime costs of participants' support packages which recognises that 'better outcomes for participants should generally result in lower long-term costs of disability support in the future'. While this analysis of lifetime costs is interesting, there appears to be no adjustment to payment projections as a result.

The Scheme Actuary should report on the extent to which supports of the type described in Section 4(13) (c) are being provided, and regularly report on the impact of such supports on package sizes in coming years, and resulting projections.

Service use response to price pressures

The NDIA generally sets prices for services, which is understandable as a means of containing expenditure. However, there is the possibility that a lower price for a service (such as a group day support service) could lead to participants choosing a higher cost service (such as a one on one service).

The Scheme Actuary now has the information to investigate trends in service use, to relate service use to price movements, and to make proposals on future price movements in response, hopefully in future reports.

Change in the profile of NDIS participants over time

Current NDIS participants include many older people who grew up in very disadvantaged circumstances for people with disability. Deinstitutionalisation started in the 1980s and continued over the following two decades. Residents of institutions had limited opportunities to learn living skills. More generally, education for people with disabilities was limited and, in many cases, separated from mainstream schools, again limiting not only education opportunities but also opportunities to participate in social and community activities.

New entrants to the NDIS will gradually replace these older participants, and should come with more education, living skills and enhanced community participation capacities. Already the NDIA has an experience base to analyse the packages of supports being provided to people of varying ages and backgrounds, which would

enable them to develop a view on differences in support requirements. Reports on such analyses would be a welcome addition to future reports.

Variation in Number of Participants and Package size across States

The June 2021 NDIS Quarterly Report contains interesting information on interstate variability.

Table 6 shows participant numbers for each State and Territory, their share of the Australian total and their share of the Australian population at 30 June 2021.

Table 6: Number of participants by State/Territory at 30 June 2021

State/Territory	NDIS participants	Percent of total	Percent of population
NSW	144,890	31.1	31.8
Victoria	124,501	26.7	25.9
Queensland	92,742	19.9	20.3
WA	39,951	8.6	10.4
SA	41,034	8.8	6.9
Tasmania	10,657	2.3	2.1
ACT	8,586	1.8	1.7
NT	4,196	0.9	1.0
Australia	466,619	100.0	100.0

Source: NDIS June 2021 Quarterly Report, Addendum 2

ABS population estimates March 2021 (www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release)

People who live in Supported Independent Living (SIL) generally have much larger support packages than other participants. Table 7 shows average payments per participant for SIL and non-SIL participants in each State and Territory.

Table 7: Average payment per NDIS participant: SIL & non-SIL

State/Territory	SIL (\$000)	Non-SIL (\$000)
NSW	325	39
Victoria	285	36
Queensland	350	43
WA	275	38
SA	340	33
Tasmania	340	36
ACT	335	34
NT	520	52

Source: NDIS June 2021 Quarterly Report, Addendum 2 (approximate, as extracted from charts)

Western Australia stands out for a relatively small share of participants and a low level of average payment. Historically, WA had a well-managed disability sector, including

Local Area Coordinators, under its long-established Disability Services Commission, and analysis of its experience may suggest pathways for improved pathways in other jurisdictions.

South Australia, on the other hand, has a high share of participants, with average payments for SIL also relatively high. Prior to the NDIS, SA had a relatively well-resourced disability services sector.

These variations suggest areas meriting analysis by the NDIA to achieve a more uniform implementation of the NDIS across Australia. In turn, that could lead to possible alternative assumptions for projections:

- Applying the WA experience to Australia
- Progressive reduction of the disparities across jurisdictions.

Conclusion

The NDIS 2020-21 Annual Financial Sustainability Report represents a significant improvement in transparency of the approach taken by the Scheme Actuary to project NDIS expenditure. This is welcome.

This paper has raised a number of issues arising from the 2020-21 Report, in particular the methods used to project both the participant numbers and future payments. There is no suggestion that this list of issues is complete.

It is essential that enough data and analyses are published by the NDIA to allow independent expert commentators and policy makers to have confidence in the projections.

A particular item needing more analysis and discussion is the role of a participant's level of function in deciding on package composition and consequent payments. The 2020-21 Report projects that future changes in mix of participants has the effect of lowering cost projections, but the mix compounds changes in age composition, level of function and type of disability and SIL status. In addition, the Report projects that newer entrants have lower costs than all participants after adjusting for age, disability type and level of function.

On the other hand, the Report points out that participants' level of function has been decreasing over the time they have been participants (P33). This is reported to be related to assessment methods: 'Given the relative lack of ability to control the consistency of functional assessments, it is likely that this trend reflects inconsistent assessments over time.'

The ongoing debate about the methods of assessment tools for NDIS participants, and in particular the role of assessment of level of function in determining package size and composition, needs to be informed by in depth analyses of past and current relationships between level of function and package size and composition.

The commitment of the NDIA to co-design of NDIS reforms, which is described in the 2021-22 Quarter 1 Report, needs to be supported by a shared understanding of the Scheme Actuary's projections. That report contains outcomes of two co-design workshops in September 2021. Of the 10 outcomes reported, outcome 4 is very relevant here:

To need to work together to better understand the issues the Scheme is facing, **including financial sustainability**, from all stakeholder perspectives (emphasis added)

Reflecting the size and complexity of the NDIS, there was an NDIA proposal in 2014 to establish an independent Centre for Actuarial, Applied and Economic Research and Evaluation in Disability (CAERED). Several Universities' actuarial centres tendered for this opportunity¹. The Centre did not proceed. Such a centre could have been a focus for a range of analyses and consequent debate about the evolution of the NDIS, the issues

arising and policy options to respond. The collaborative spirit of that proposal would be worth re-visiting.

The NDIS is a highly valued response to the needs of people with disability for supports. It is a major social insurance initiative. The NDIS is not unexpectedly facing challenges as it matures. The release of the 2020-21 NDIS Annual Financial Sustainability Report and earlier the Interim Update July 2021 are valuable steps forward in informing the community about the financial issues facing the NDIS.

If decisions relating to future coverage and/or entitlements under the NDIS are to be made based substantially on these projections, further detailed analysis and comparisons are required, as well as discussion of the projection methodology. Such work needs to be publicly available in full to relevant experts and stakeholders, so that they can fully understand and have confidence in the projections.

¹ The author was part of a CAERED tendering group