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Mr Bruce Bonyhady
Chair
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Dear Mr Bonyhady

REVIEW OF FINANCIAL SUSTAINABILITY REPORT

This letter reports on my review of the first annual Financial Sustainability Report (FSR) prepared by the scheme actuary.

Background

Subsection 180B(1) of the *National Disability Insurance Scheme (NDIS) Act 2013* provides that the scheme actuary will prepare an annual FSR.

Part 3 of the *NDIS Rules for the Scheme Actuary* (attached) sets out certain requirements in respect of the contents of the FSR.

Under subsection 180E(2) of the NDIS Act, the reviewing actuary is required to review and report on each annual FSR. I have been nominated by the Board to be the reviewing actuary for the first three years of the scheme.

The FSR has generally satisfied the requirements set out in the Rules. However, a number of the requirements set out in the Rules could not practically be met for this first FSR. Importantly, this has not diminished the value of the FSR.

Since financial sustainability is inherently a long term concept, my review has focussed on the reasonableness of the scheme actuary's projections of long term costs of the NDIS. I have also considered a number of related issues identified by the scheme actuary in the FSR.

NDIS trials

A key purpose of establishing trial sites was to inform more reliable estimation of full scheme costs. However, NDIS trials only commenced in July 2013 and the first FSR has therefore been prepared with the benefit of only a single year of trial experience from four trial sites across NSW, Victoria, South Australia and Tasmania. Furthermore, the trial sites are not necessarily representative of the eventual NDIS population when the scheme has been fully phased in. This is particularly the case for South Australia and Tasmania where access is restricted to certain age groups, but other factors, such as the presence or otherwise of residential care facilities within a trial site also have the potential to distort experience. As a result, the trial site experience to date is generally not yet adequate for assumption setting purposes.

Accordingly, a number of the major assumptions used by the scheme actuary are based largely on other information, including the 2011 work of the Productivity Commission (PC). I would expect to see an increasing reliance on the trial site experience in setting assumptions as the volume and reliability of the trial site experience data increases.

Projections of long term cost

In order to prepare long term cost projections, a set of long term assumptions needs to be developed. The key assumptions required are in respect of:

- the numbers of participants when the NDIS reaches full scheme;
- the profile of participants (by age, sex, disability type, disability severity);
- rates of entry into the scheme for new participants entering after the NDIS reaches full scheme;
- rates of exit from the NDIS;
- the cost of participant supports to be funded by the NDIS, disaggregated by age and disability;
- the rate of inflation in those costs;
- the value of any offset to NDIS costs that might emerge under the National Injury Insurance Scheme (NIIS);
- Agency operating costs; and
- future GDP (in order to express long term costs as a percentage of GDP).

I have briefly discussed each of these below.

Numbers of participants when the NDIS reaches full scheme

The scheme actuary has relied largely on the work of the PC here, along with ABS estimates of population growth between 2011 and 2020.

That is, relatively little weight has been given to the first year of trial site experience in setting the assumptions around full scheme participant numbers.

I regard the approach taken as sensible.

However, this should not be taken to imply that the first year of trial site experience supports a view that the PC estimates are likely to continue to be the best available. Rather, it reflects the fact that more data is required before assumptions in this area can be set by reference to the experience in the trial sites.

Profile of participants

The *age and sex profile* of the (limited) trial site experience to date appears broadly consistent with expectations based on the PC work and other available data (eg epidemiological data). The assumptions are based on an amalgamation of data from these sources.

The NSW and Victorian trial site distributions of *primary disability type* appear similar. However, I note that more work is needed to develop a robust classification methodology. Once that is done, trial site experience should increasingly provide useful insight into this dimension of the full scheme participant population.

One notable feature of the data to date is that fewer participants have entered the scheme with mental illness than would have been expected based on PC projections. The reasons for this are not yet clear, which provides further support for caution in departing from baseline PC participant number estimates at this time.

Note that for the purpose of the long term cost projections in this first annual sustainability report, the key participant profile assumptions were around age and primary disability.

Rates of entry to and exit from the NDIS

For this first annual FSR, assumptions around entry and exit rates were based on age and disability. This approach is sensible given the age restrictions that apply to new entrants. The rates themselves were derived by considering available epidemiological data as well as the limited scheme experience. I note that the PC did not include a projection of costs over time and hence did not require these assumptions.

The assumptions chosen appear realistic although long term rates of entry and exit are obviously hard to predict with confidence at this early stage.

Importantly, the chosen assumptions are coherent. That is, the assumed new entrant rates and exit rates work together in a way which sees a fairly stable age structure (0-64 year olds) among the projected participants over the 30 year projection period. Moreover, they also produce a participant population (0-64 year olds) which represents a fairly steady proportion of the projected total Australian population of 0-64 year olds, in line with disability prevalence rates assumed by the PC. It is not yet possible to estimate what impact the NDIS might eventually have on the age structure or number of participants in the long run and a set of assumptions that result in a stable age structure and population is entirely reasonable.

Distribution of cost of participant supports to be funded by the NDIS

For the purpose of the long term cost projections in this first annual FSR, the key assumptions were around the *distribution of package costs* by age and disability type. Package costs have been assumed to generally increase with age – the oldest participants are assumed to have package costs more than three times those of the youngest participants. Notably, this is not inconsistent with the limited observed trial site experience to date, nor with the views of the PC. At subsequent reviews I anticipate further disaggregation of the package cost distribution.

The actual trial site distributions of support package cost (here, this refers to the numbers of participants with different support package amounts) observed during the first year of trial site experience warrant discussion.

Noticeably fewer participants have low cost support packages at the end of the first year of trials than might have been expected, based on PC estimates.

In my view, this feature of the trial site experience has led to an inappropriate emphasis on average package cost. Thus, a result of fewer than expected low cost participants is a higher than expected average package cost. However, it does not automatically follow that higher average package cost will lead to higher total scheme cost. And, from a financial sustainability perspective, total scheme cost matters far more than average package cost. Moreover, average package cost cannot be relied upon as an indicator of total scheme cost.

Importantly, despite the apparently high average package cost, the distribution of total cost of support by support package size seen so far in the trial sites is not inconsistent with PC expectations. This reflects that total scheme cost is influenced more by the number of participants with high cost support packages than it is by the number of participants with low cost support packages. For example, an additional 15 high cost participants (> \$100,000) would have the same impact on total costs as an additional 200 low cost participants (<\$30,000).

Cost inflation

The rate of inflation in scheme costs will have a significant impact on long term costs.

Costs have been assumed to increase in line with the underlying inflationary forces. Importantly, no allowance has been made for the possibility of extraordinary cost inflation which might emerge for a number of reasons, for example:

- without proper controls and discipline, Agency decision making around support packages might lead to a form of package creep; or
- if there is an imbalance between demand for support from participants and supply of support from the service provider sector, the price of support might increase faster than general (wage) inflation.

I support the scheme actuary's decision not to allow for any extraordinary cost inflation in these projections. Rather, in setting the cost inflation assumption, the scheme actuary has had regard to expected underlying inflation and has implicitly assumed disciplined Agency management and sufficient supply to match support needs. While I support this approach, the possibility of extraordinary cost inflation cannot be ignored and, indeed, the Agency needs to do everything in its control to minimise the risk of extraordinary cost inflation emerging. Along with ensuring the necessary systems and processes are in place for monitoring package cost trajectories, there is a continuing need to do further detailed work on the development of effective reference package tools to support the management of package cost trajectories.

NIIS offset

The scheme actuary has assumed an 'offset' to the NDIS costs in respect of both future catastrophic injuries after the full scheme rollout is completed and a number of existing participants of certain injury schemes.

The assumptions adopted appear realistic although they have been set within a context of substantial uncertainty regarding the eventual number of NIIS participants, related in part to the eventual scope of the NIIS.

It is noteworthy that, when implemented, the NIIS will have an increasing impact on NDIS costs. The full impact will not be realised for at least sixty years.

Agency operating costs

Agency operating costs have been assumed to be 7 per cent of annual full scheme support package costs.

Although this does not appear unrealistic for the current purpose (which is an initial projection of long term scheme costs), my sense is that this might be more likely to be on the low side than on the high side. It is, of course, to be expected that operating costs will represent a much bigger proportion of support package costs before the ramp up to full scheme. It is also important to note that, while the Agency should always strive hard to operate as efficiently as possible, unless the operating budget is adequate, ongoing

financial sustainability cannot be assured. Indeed, relatively small investments in operating expenditure could have a major impact on controlling direct support costs.

Future GDP

The assumptions around future GDP have been derived from Treasury projections and are reasonable.

General conclusions on the assumptions and the projections

I am satisfied that the assumptions adopted by the scheme actuary are reasonable for the purpose of obtaining a realistic projection of long term scheme costs.

In time I anticipate further disaggregation of some items. However, at this time, such disaggregation is neither necessary nor, indeed, practical.

Having regard to the assumptions adopted by the scheme actuary, I have carried out high level reasonableness checks on the long term cost projections themselves. That is, I have sought to ensure that the projections are consistent with the adopted assumptions.

I have been able to broadly replicate the scheme actuary's projections and therefore I am satisfied that the projections are consistent with the assumptions adopted.

In my view, the projections of long term cost expressed as a percentage of GDP are more meaningful than the dollar value projections.

Related Issues

The scheme actuary has identified a number of issues which have implications for the financial sustainability of the scheme and which, in my view, warrant careful consideration. I have mentioned a number of important issues briefly below.

IT system

The statement by the scheme actuary that the IT system does not meet requirements should be heeded. This issue needs to be dealt with.

Among other things, the IT system needs to:

- Provide expert support to planners making support package decisions, including but not only through a properly functioning reference package tool; and

- Support capture and maintenance of the longitudinal data necessary for comprehensive, timely and ongoing analysis of scheme experience (including around support package decisions).

Unless the IT system is fit for purpose, it will not be possible for the Agency to give adequate effect to its obligation to adopt an 'insurance based approach' to the delivery of the NDIS.

Ramp up to full scheme

The projections see the scheme ramping up quickly from the end of the trials in 2017 to full scheme by 2020.

I understand that the projections have been prepared in a way that is intended to align with the current policy settings around the ramp up to full scheme.

I do not believe that the FSR projections can or should be taken as an indication that the trajectory from trials to full scheme is easily manageable. Indeed the scheme actuary has pointed to the pace of ramp up as an issue that requires consideration. I support this. The transition to full scheme cannot happen successfully before the creation of sufficient additional capacity in the service sector. Put simply, if the ramp up to full scheme happens at a rate faster than the service provider sector can accommodate, then this will present a risk to both scheme cost and scheme credibility.

While the pace of the ramp up is ultimately a matter for governments, the Board needs to be in a position to provide input. This suggests that the Board needs to consider how it might foster and monitor service sector capability and readiness.

Long term perspective

An NDIS participant is likely to be a participant for life.

This has important implications for financial sustainability. Agency spending decisions need to be taken with a long term perspective in mind. The importance of disciplined Agency spending cannot, of course, be overstated. However, the test in this regard should consider the long term as well as the short term. That is, the Agency will need to have close regard to the long term implications of its (short term) spending decisions as well as the short term implications of its (short term) spending decisions.

A major point to take from this discussion is that the funding model for the NDIS needs to support this long term approach. A funding model which required the Agency to focus too heavily on the short term (for example, by over-weighting the importance of meeting short term budgets at the expense of proper consideration of long term outcomes) would, eventually, prove counter-productive.

While the Agency does not control the funding model, it should seek to engage in relevant discussions with this in mind. As well, the Agency should seek to develop further a framework for assessing the reasonableness of candidate spending decisions against a long term criteria set.

Over 65s

A feature of the long term cost projections is the increasing proportion of total scheme cost that is attributable to participants aged more than 65.

The PC did not consider the long term costs of spending on NDIS participants aged more than 65 in its 2011 report. The PC implicitly assumed that participants should be indifferent between choosing to stay in the NDIS and choosing to revert to the aged care system upon turning 65. In other words, the PC implicitly assumed that the cost of spending on NDIS participants aged more than 65 should be cost-neutral when considered within the context of the overall Commonwealth budget.

This first annual FSR has highlighted that, in the medium term, the costs associated with participants aged more than 65 will increase and become a significant proportion of the overall scheme cost. This cost can be thought of as a partial offset to the cost of the aged care system.

Older-aged NDIS participants will represent a relatively small proportion of the total population aged more than 65. However, it will be important to ensure that the level of support available to older-aged NDIS participants is consistent with the level of support available to other older-aged people. It would be problematic, for example, if more (disability) supports are available to older-aged NDIS participants than to other older-aged people who acquire disability after reaching age 65.

In my view, this issue warrants consideration by the Board. It has implications not only for management of the NDIS but also in respect of broader policy settings.

S180E(3)

Finally, in accordance with subsection 180E(3) of the NDIS Act, I note that the Agency has taken the steps necessary for me to undertake this review.

Yours sincerely



Peter Martin
Australian Government Actuary

Part 3 Content of annual financial sustainability report

8. GENERAL ASSESSMENT AND RECOMMENDATIONS

The scheme actuary must include the following matters in an annual financial sustainability report:

- (a) an overall assessment of the financial sustainability of the NDIS that identifies the key risks and issues impacting on the financial sustainability of the NDIS;
- (b) a discussion of the key risks and issues identified and, where these have an adverse impact on financial sustainability, recommendations designed to manage the risks or address the issues.

9. RECENT EXPERIENCE

The scheme actuary must include the following matters in an annual financial sustainability report:

- (c) a summary of the participant data at the effective date of the annual financial sustainability report;
- (d) a section that identifies and comments on significant features or trends in the recent experience of the NDIS, including any impacts due to external factors, and covers the following:
 - (i) changes in the number and characteristics of participants (including in relation to access criteria and assessed support needs);
 - (ii) changes in the distribution of support package costs;
 - (iii) participant outcomes;
 - (iv) the Agency's operating expense experience;
 - (v) the total cost of the NDIS;
 - (vi) deviations in actual experience from expected experience, and the reasons for the deviations;
 - (vii) any other relevant experience, including the use of innovative approaches;
- (e) comments on any steps taken or proposed by the Board and senior management of the Agency to address areas of deviation and adverse experience;
- (f) any recommendations of the scheme actuary in relation to areas of deviation and adverse experience.

10. PROJECTIONS

The scheme actuary must include the following matters in an annual financial sustainability report:

- (g) projections of future experience in the form of the best estimates of the following matters, with discussions of the projections:
 - (i) future expenditure on care and support—presented as a set of cashflow projections over the long run, both in future dollar terms and as a percentage of GDP;
 - (ii) lifetime cost of care and support to standardised new entrant cohorts—presented in the form of net present values, both in discounted dollar terms and as a percentage of GDP;
 - (iii) future expenditure on care and support to current participants on the assumption of no change in the scheme design—presented in the form of a projection of net present values, both in discounted dollar terms and as a percentage of GDP;
- (h) a discussion of any changes in the projections since the previous annual financial sustainability report or other more recent set of projections provided by the scheme actuary to the Board, including the reasons for the change and any implications for the financial sustainability of the NDIS;
- (i) any recommendations of the scheme actuary in relation to any adverse changes in the projections;
- (j) a justification of the methodology and key assumptions used to prepare the projections;
- (k) comments on the extent to which the valuation assumptions are based on the historical experience of the NDIS and, if the assumptions have changed since the previous annual financial sustainability report, the reasons for that change and the consequences of the change;
- (l) a practical discussion of the level of uncertainty that surrounds the projection, including sensitivity or scenario analysis, a discussion of the main drivers of uncertainty, and any recommendations of the scheme actuary for managing uncertainty.

11. ADMINISTRATIVE INFRASTRUCTURE, PROCESSES AND RISK MANAGEMENT

The scheme actuary must include the following matters in an annual financial sustainability report:

- (m) a discussion of the Agency's administrative infrastructure, its administrative processes and risk management arrangements (***risk management arrangements*** are defined in section 3);
- (n) comments on the adequacy of the Agency's processes, including on the suitability and adequacy of:
 - (i) any decision support tools; and

- (ii) its data and information systems; and
- (iii) its processes for monitoring emerging experience and responding to adverse movements in emerging experience;
- (o) any recommendations of the scheme actuary in relation to any inadequacies.

12. OTHER MATERIAL MATTERS

The scheme actuary must include the following matters in an annual financial sustainability report:

- (p) a section identifying and discussing any other matters that the scheme actuary believes are material to the financial sustainability of the NDIS;
- (q) comments on the extent to which any previous recommendations have been acted on by the Agency.