Scheme Actuarial Valuation as at 31 December 2019

ReturnToWorkSA

March 2020

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finity

Actuarial and Insurance Consultants

23 March 2020

Mr Greg McCarthy
Chair
ReturnToWorkSA
400 King William Street
ADELAIDE SA 5000

Dear Mr McCarthy

Scheme Actuarial Valuation as at 31 December 2019

Enclosed is our report on the 31 December 2019 scheme actuarial valuation.

As you will see, there are a number of areas of claims cost pressure at the moment, due mainly to more claims continuing on Income Support payments for longer. This can partly be explained by a worsening claims mix, with claim numbers increasing in the higher cost segments of the portfolio, and partly by lengthening claim durations (slower RTW).

On top of this pressure on front end claims, there continues to be a large number of claimants seeking to access the Serious Injury benefit package. With considerable 'legal uncertainty' still in the scheme, and the large number of open disputes and slow rate of dispute resolution, there is still a material risk to the valuation results that Serious Injury claim numbers will be higher than we have allowed. On current trends it is likely to be at least another two years, and perhaps longer, before the real-world operation of the RTW Act is confidently known.

We would be pleased to discuss our review and findings with your executive and Board as required.

Yours sincerely

Andrew McInerney Tim Jeffrey Gae Robinson

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Scheme Actuarial Valuation as at 31 December 2019

Glossary

Active Claim	A claim is regarded as 'active' in the valuation models if it had a payment in the relevant period.
Actuarial Release	A 'like with like' measure of how claims management activity has impacted on scheme financial performance since the previous valuation. See Section 11.3 for additional information.
APR	Average Premium Rate – the premium charged by ReturnToWorkSA to registered employers, on average, as a percentage of leviable wages.
BEP	Break Even Premium – the estimated cost of running the scheme for a year, including all future payments for claims incurred in the year after allowing for investment earnings, expressed as a percentage of leviable wages.
Development Quarter or DQ	The number of quarters between the injury date of a claim and the relevant activity (whether a claim report or claim payment).
ER	Incentives for early reporting of claims, introduced in 2008.
IBNER	Incurred But Not Enough Reported – an allowance for cost growth on known claims in addition to the reported cost.
IBNR	Incurred But Not Reported – claims where the accident has occurred, but ReturnToWorkSA is yet to be notified.
IS	Income Support (also known as weekly benefits) payments.
NWE	Notional Weekly Earnings.
OSC	Outstanding claims liability.
PPAC	Payments per active claim.
PPCI	Payments per claim incurred.
RTW	Return to work.
RTW Act	The Return to Work Act 2014, which governs the scheme.
Serious Injury or Serious Injury claim	A claim that meets the definition of a "Serious Injury" under the RTW Act.
Short Term claim	A claim that does not meet the Serious Injury threshold.
WRCA ('old Act')	Workers Rehabilitation and Compensation Act 1986, the previous Act which governed the scheme.
WPI	Whole Person Impairment.

Part I Executive Summary

1 Introduction

Finity Consulting Pty Limited ("Finity") has been engaged by ReturnToWorkSA to undertake an actuarial review of the Return to Work Scheme ("the scheme") as at 31 December 2019.

Our previous actuarial review was as at 30 June 2019, and was documented in a report dated 26 August 2019.

2 Scope of the Review

The scope of the review is specified in our contract with ReturnToWorkSA.

The primary purpose of the mid-year review is to provide ReturnToWorkSA with an independent estimate of the liability for outstanding claims and projected claim costs for registered (non self-insured) employers. These estimates are used by ReturnToWorkSA to update its financial position, and as an input in determining the average premium rate for the coming year.

The actuarial review also aims to provide analysis of the major features of the recent scheme claims experience, and a projection baseline against which ReturnToWorkSA can manage outcomes and monitor emerging experience in the coming year.

3 Valuation Approach

Our estimate of the outstanding claims liability is a central estimate of the liabilities. This means that the valuation assumptions have been selected such that our estimates contain no deliberate bias towards either overstatement or understatement.

Our estimates of the outstanding claims liabilities project future benefits separately for Serious Injury claims and for Short Term claims, reflecting the differences in benefits available between the two groups under the RTW Act.

We have also provided a recommended provision for outstanding claims which increases the central estimate to a level intended to achieve 75% probability of sufficiency. Our risk margins continue to include a higher than normal allowance for 'legal uncertainty', since the large number of open disputes and slow rate of dispute resolution still present a material risk to the valuation results (particularly for Serious Injury claims).

4 Scheme Environment

Recent developments which affect the scheme's operating environment and/or the liability estimate include:

- **Legal precedent**: the RTW Act continues to be tested through the scheme's dispute resolution processes, and legal precedent on a number of key issues is still emerging. The result is that there is still a range of circumstances where there is uncertainty about how and where the scheme's legislative boundaries will apply; as such, the real-world operation of the Act is still yet to be confidently known, and it is possible that more claims will access longer periods on benefits than has currently been projected. Of particular importance to our assessment are the provisions about how and when a claim is determined to be a Serious Injury.

- **Dispute resolution and appeals**: related to the above point, the number of open disputes remains high, and the resolution of disputes is slow. For example, there are still almost 1,000 open disputes from transitional (pre-June 2015) claims as at December 2019. Further, rates of appeal continue to be high by historical standards, following changes in the RTW Act that mean legal costs are no longer at risk at the early stages of an appeal. This is lengthening disputes and increasing legal costs, and has led to higher non-claimant related costs (e.g. medico-legal costs).
- **Evolution of the claims management model**: changes to the claims management model have led to the earlier identification of Serious Injury claims, and project work to speed up the WPI assessment process has led to an increase in WPI assessments on both transitional and RTW Act claims. These are positive steps in terms of managing the largest financial risk areas for the scheme, and over time will help with our understanding of likely future outcomes.
- **Growth in Hearing Loss claims:** there has been very rapid growth in the numbers of Hearing Loss claims over the last 18 months. A key driver of this appears to be the entry of new specialist hearing loss providers to South Australia and (we are told) a higher than usual level of advertising and target marketing.
- **Potential silicosis claims:** we are advised that recent external screening programs have led to the diagnosis of 22 workers with forms of silicosis or lung disease, although at this stage none of the 22 has lodged a workers compensation claim. While this is an increase from the number of known affected workers at the previous valuation, at this time we have not made any additional allowance in the central estimate liability on account of these 22 diagnoses; they appear to be (currently) at the lower severity end for these types of illnesses.

5 Recent Claim Experience

The key features of the claims experience in the six months to 31 December 2019 were:

- For claims managed entirely under the RTW Act:
  - Claim numbers have grown each year since 2017, which is unfavourable for the scheme in the context of a longer term trend of reducing claims frequency and numbers. The recent increase in claim numbers is partly explained by the strong increase in hearing loss claims noted above, but other injury types have also trended upward over the last few years as well.
  - On top of the higher claim numbers, a growing proportion of claims are getting at least two weeks of wage replacement benefits, which is the threshold to be included in our 'Income Support' claims count. In addition, claim durations have increased such that higher numbers of claims are remaining on Income Support benefits for longer.

    The combination of these elements – more claims, more of these getting Income Support, and a growing cohort staying on benefits for longer – is producing compounding deterioration in the cost of RTW Act claims. At this stage there is no indication that this will lead to any increase in WPI scores, and nor have we allowed for any; if this occurred it would lead to further material increases in the claims cost – for example through higher lump sums and/or more claims reaching the Serious Injury threshold.

    - Lump sum payments have begun to speed up, following additional work to encourage WPI assessments. This is also evident for transitional claims.
    - The number of disputes per month continues to run about 30% lower than pre-reform levels, although this is not as favourable as our assessment was six months ago, as the increase in lump sum activity appears to have also increased dispute numbers.
- For transitional claims, there continues to be a much higher than anticipated level of disputation, with 985 disputes still open on the transitional cohort, and another few hundred claims still open for other reasons. At the current rate of claim dispute closure, it will be several years before the transitional cohort is finalised.
- The level of Serious Injury activity (applications, disputes and higher numbers) continues to be higher than expected.
    - There continues to be a 'tail' of late emerging new Serious Injury claims; this experience is quite different from our expectation that most applications would have been made shortly after the cessation of Income Support. For transitional claims this means claims are still emerging more than two and a half years after the end of Income Support (for most transitional claims) in June 2017.
    - For fully RTW Act claims, ReturnToWorkSA has changed the claims management approach to identify 'likely' Serious Injury claims much earlier, which is a positive step. There has also been a change to the Serious Injury acceptance approach following the Full Court's *Mitchell* decision which has led to fewer claims being accepted as Serious Injury. Overall there is still a high level of uncertainty about how many Serious Injury claims will emerge for these cohorts, and it remains possible that our estimates will prove to be too low.
    - Medical and treatment costs for Serious Injury claims have continued to be lower in the periods after initial treatment is completed. As previously noted, the only qualitative explanation we have received for this is that claimants 'no longer need to look sick' to remain on benefits.

Total net claim payments in the six months were $13.8 million (7%) higher than expected, and gross claim payments were up 25% on the previous six months. Payments were: $13 million higher for Income Support (+18%), $6 million lower due to lump sums on Serious Injury claims taking longer to be paid than anticipated, and $7 million higher on medical and treatment costs. Legal costs were also $2 million higher than expected.

6 Liability Valuation Results

Summary of Results

Our central estimate of the scheme's outstanding claims liability for registered employers as at 31 December 2019 is $2,839 million. This is a discounted (present value) estimate, net of recoveries and including allowance for future expenses. Adding a risk margin of 14% (unchanged from previous) to produce a provision with a 75% probability of sufficiency, consistent with ReturnToWorkSA's reserving policy, gives an outstanding claims provision of $3,237 million, as shown in Table 1. The provision includes an allowance for future claims handling expenses equivalent to 10% of gross claim costs.

Table 1 – Recommended Balance Sheet Provision

	Central Estimate	Risk Margin	Recommended Provision
	$m	$m	$m
Gross Claims Cost - Serious Injuries	1,904		
Gross Claims Cost - Short Term Claims	745		
Claims Handling Expenses	255		
Gross Outstanding Claims Liability	2,904	407	3,311
Recoveries	-65	-9	-74
Net Outstanding Claims Liability	2,839	397	3,237

Table 1 indicates that the majority of the OSC liability relates to Serious Injuries. The balance will continue moving toward Serious Injury liabilities over time, particularly if lump sums continue to speed up.

As previously noted, the risk margin is still higher than it would be if the workers compensation system was operating with lower 'frictional costs' than it does currently; that is, the risk margin would reduce further if there were fewer disputes, faster resolution of disputes, lower rates of appeal, and fewer key legal questions being challenged.

Movement in Liability

Our central estimate is $40 million higher than projected at the previous valuation. We have attributed the change in central estimate to two components:

- Movement in liability due to claims performance – this covers the components that are due to claim outcomes (such as changes in the number and mix of claims), as well as the impact of revisions to our valuation assumptions. This step also includes the impact of changes in the timing of lump sum payments; slower than expected lump sums lead to an increase in the remaining liability.
- Impact of changes in economic assumptions – this component is mandated by accounting standards, and therefore outside ReturnToWorkSA's control.

This split also allows calculation of the 'actuarial release', where we add the difference between actual and expected payments to the movement in the liability due to claims experience, to give a measure of the 'profit' impact of claims management performance relative to the previous valuation, as shown in Table 2 below.

Table 2 – December 2019 Central Estimate and Determination of Actuarial Release/(Strengthening)

	Central Estimate		
	Liability Estimate[1]	AvE Payments in 6 mths to Dec-19	Actuarial Release/ (Strengthening) [2]
	$m	$m	$m
Liability at Jun-19 Valuation	2,722		
Projected Liability at Dec-19 (from Jun-19 valuation)	2,799		
Claims Movement - Short Term Claims	47	19	-65
Claims Movement - Serious Injury	-3	-5	8
Impact of Change in economic assumptions	-4		
Recommended Liability at Dec-19	2,839		
Total Actuarial Strengthening			-57

[1] Net central estimate of outstanding claims liability, including CHE

[2] Includes change in OSC and Act vs Exp payments.

There is an actuarial strengthening (increase) of $57 million for the period, an unfavourable result for the scheme. Changes to economic assumptions decreased the central estimate by $4 million. Each of these items is discussed briefly below.

Components of the Actuarial Release/(Strengthening)

Table 3 shows the actuarial strengthening by entitlement group, and split between Short Term claims and Serious Injuries. As this shows, the overall $57 million actuarial strengthening is driven by results on the Short Term Claims cohort.

Table 3 – Actuarial Release/(Strengthening) by Entitlement Group

Entitlement Group	Short Term Claims[3]	Serious Injury Claims[3]	Total Actuarial Release [3]	Release as %
			$m	
Income & Related	-37	1	-36	-6%
Lump Sums	-6	1	-5	-1%
Legals	-7	0	-7	-7%
Treatment Related [1]	-15	1	-14	-1%
Rehabilitation	-3	2	-1	-2%
Other Costs [2]	0	0	1	6%
Recoveries	8	3	11	19%
Total Claim Costs	-60	8	-52	-2%
Expenses	-6	0	-6	-2%
Net Central Estimate	-65	8	-57	-2%

[1] Medical, hospital, physical therapy, travel, other

[2] Investigation, common law, commutation, LOEC

[3] Includes change in OSC and Act vs Exp payments.

The major factors contributing to the $57 million actuarial strengthening at the current valuation are:

- For **Short Term claims**, the actuarial strengthening (negative release) of $65 million is the result of:
  - An increase of $37 million on Income Support claims. This is the combined impact of higher than expected payments of $13 million in the six months to December 2019 and our valuation response of $23 million. There has been an increase in the proportion of claims that get Income Support (more than two weeks off work) and more claims are continuing through to 6-24 months on benefits than in recent years. This is partly explained by changes in the mix of claims, with increases in the numbers of mental injury and musculoskeletal claims which tend to remain on Income Support longer than other types of claims, and partly by lengthening claim durations (slower RTW).
  - An increase of $14 million for Medical benefits due to a combination of the flow on to extra medical costs from the increases in Income Support claims, higher numbers of hearing loss claims requiring hearing aids and medical assessment, and high medico-legal costs due to high transitional WPI assessment and dispute activity.
  - An increase of $6 million on lump sum entitlements. This is the net impact of further increased hearing loss claims and First Paid lump sums, partly offset by a reduction in Death lump sums due to favourable experience.

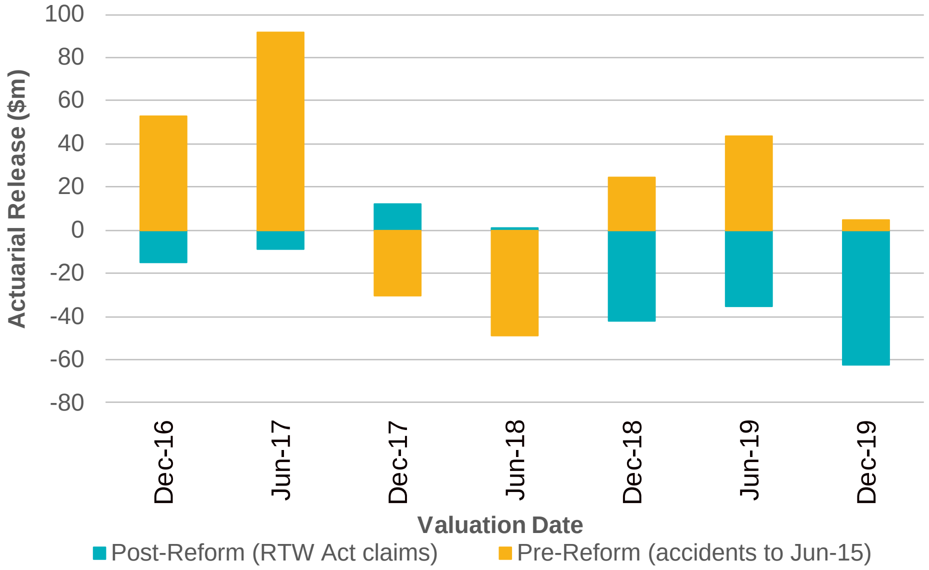
  - An increase of $7 million for legal costs, as new disputes continue and more disputes move into the later (and more expensive) stages of the dispute resolution process.
  - An increase of $3 million for vocational Rehabilitation.
  - An $8 million saving on recoveries, where there has continued to be more favourable experience than the previous basis was projecting.
- For **Serious Injury claims**, there was an overall release of $8 million, due to:
  - The net movement in claim numbers (including IBNR assumptions) resulted in a release of $17 million, largely due to fewer than anticipated Severe Traumatic Injury claims emerging, and those that did emerge having a lower average size than expected.

    We caution that while the impact of the net claim number movement for Other Serious Injury claims was essentially neutral at this valuation, we are still only allowing for a very small percentage of older ongoing claims to ultimately reach the Serious Injury boundary (around 0.8% of 2016 and 2017 claims that are still open), and pressure remains on this part of the valuation.
  - Revised estimate information for one very high care claim from the 2019 accident year resulted in a strengthening of $7 million, concentrated in Other (where care costs are captured).
  - Using the latest ABS mortality rate table resulted in a strengthening of $7 million.
  - Other valuation changes were neutral overall, but there were some offsetting impacts behind this. There were releases on older accident periods, as we continue to recognise the reduced medical and treatment spend on this cohort, while some Other Serious Injury claims had larger increases as a result of us moving to relying on their own payment experience rather than aggregate selections.
  - Payments in the six months were $5 million lower than expected, which is mostly due to lump sum timing; holding this amount in the liability produces a close to neutral result for lump sums.

Our projections for the remaining entitlement types were also reviewed and updated, although none of the movements are significant in relation to the overall scheme liability.

Figure 1 shows the actuarial release/(strengthening) at each valuation over the last few years. The current results are the third in a row where there has been cost growth on RTW Act claims. While the latest results are mainly due to deterioration in the Short Term Claims cohort, the potential for increases in the number of new Serious Injury claims still remains; this was a key factor in the earlier strengthenings for both RTW Act and Pre-Reform claims.

Figure 1 – History of Actuarial Releases/(Strengthenings)



Impacts of Economic Assumption Changes

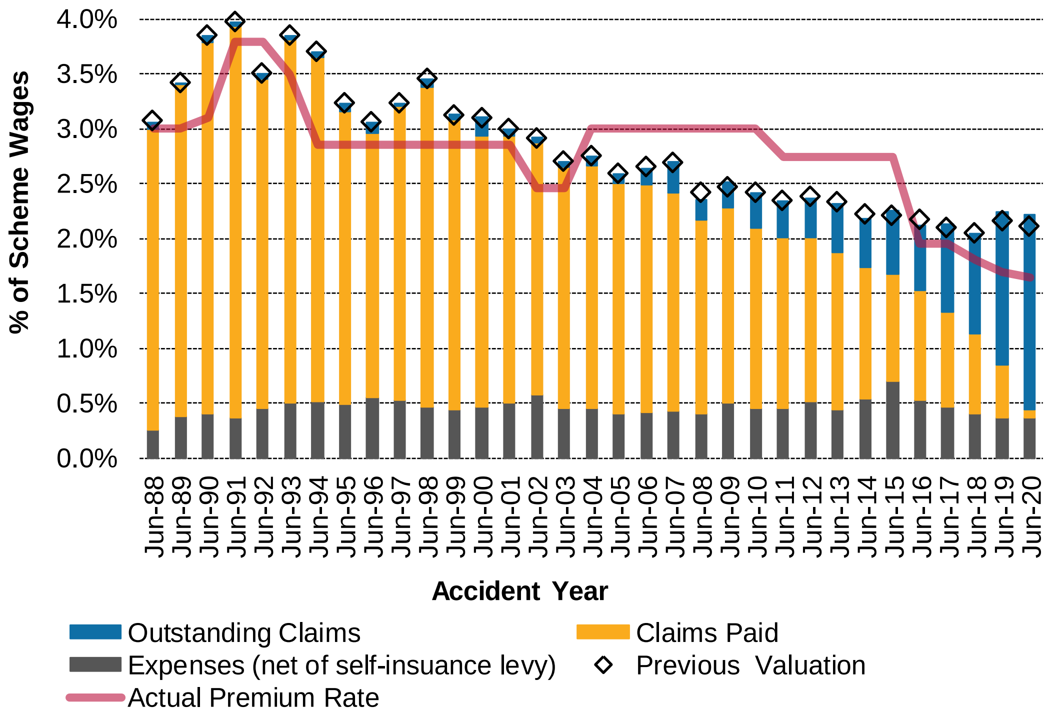
Changes to inflation and discount rate assumptions decreased the central estimate by $4 million. As discussed in Section 10.1, there were relatively small movements in discount rates and projected wage inflation between 30 June 2019 and 31 December 2019 – although it should be noted that there have been major post-balance date movements in discount rates (this is discussed further in the uncertainties section below). The current assumptions imply a negative real yield (i.e. projected wage inflation exceeds the discount rate) out to nearly 15 years into the future.

7 Historical Scheme Costs

We have estimated the 'historical premium rate', otherwise known as the Break Even Premium rate (BEP), for each past accident year; this is the amount that would have been sufficient to fully cover claim costs, expenses and recoveries, assuming the scheme achieved risk free investment returns each year and that the current actuarial valuation is an accurate forecast of future payments. The BEP is calculated by dividing the total projected costs for the accident year (discounted to the start of that year at risk free rates) by the total scheme leviable remuneration in that year. We present the costs on this basis, using risk free discount rates, so that a like with like comparison can be made over the history of the scheme, allowing current scheme performance to be assessed in a long term context.

Figure 2 shows a summary of the estimated BEPs, including a comparison with the estimates at our previous valuation and the scheme's actual average premium rate charged for each year.

Figure 2 – Break Even Premium Rate* and Actual Premium Rate Charged



* The Break Even Premium Rate in this Figure is calculated using the risk free rate, so that a like with like comparison can be made over the history of the scheme. For clarity, this is not the same as the scheme's pricing basis, as the scheme targets a higher than risk free rate of return when premiums are set.

The main points to note are:

- The introduction of the RTW Act reduced the BEP for accident years between 2008 and 2010 to just under 2.5% of wages
- For accident years between 2011 and 2018 the costs were progressively lower again, as claims had less opportunity to remain on long term benefits
- The BEP estimates for 2019 and 2020 are higher than the 2018 BEP, reversing the downward trend
- The current estimate of the BEP for the 2020 accident year is 2.22% of wages, up from 2.11% at the June 2019 valuation. The majority of this increase is attributable to changes in the underlying claims performance:
  - Short Term claim costs are projected to be 0.11% higher than at our previous valuation
  - Serious Injury costs and Scheme expenses both moved by less than 0.01% of wages and were offsetting (Serious Injury costs being marginally higher, and expenses lower).
- Scheme expenses have reduced year-on-year since 2015, when they were particularly high as a result of additional transition related costs. Expenses for the 2020 year are forecast to be 0.37% of wages, which is below the target post-reform rate of 0.40% of wages.

We note that these calculations assume past and future investment earnings at risk free rates. All else being equal, any above risk free earnings or additional sources of income would act to reduce the required premium rate.

We emphasise that (as seen in the graph) the BEP estimates for recent accident years include a significant outstanding claims estimate and are therefore likely to change as experience emerges. We also note that the adopted wages figure for 2020 still involves some estimation.

8 Key Uncertainties

There is considerable uncertainty in the projected future claim costs, in particular around how and when claims are determined to be Serious Injuries. Section 12 details some of the uncertainties and sensitivities of our advice, in order to place our estimates in their appropriate context.

The main areas of uncertainty in our current estimates of the liabilities are:

- **Legal precedent risk** – risks here relate to the possibility of decisions which are unfavourable to the scheme or the culture and behaviour of its participants. In particular, there are still many claims in dispute seeking to access higher levels of benefits than ReturnToWorkSA has determined. On current timing, this risk is likely to remain for at least another two years, and perhaps longer.
- **WPI assessments** – under the RTW Act, there are significant differences between the compensation available to claims above the 30% WPI threshold and those below. This factor, combined with the lump sum for future economic loss payable to Short Term claims, means there is pressure on WPI assessments. The scheme will face significant financial consequences if this leads to either extra claims getting over the 30% WPI threshold or 'WPI creep'. The robustness of the 'once and for all' WPI assessment rules under the RTW Act is an important area of risk.
- **Serious Injury claim costs** – these claims are entitled to benefits for life, and the risks for this group relate to factors that are common across most claims, and deviations from our assumptions that compound across multiple years. For the current valuation the key uncertainties are:
  - **Ultimate numbers of claims** – there are several areas of uncertainty in relation to claim numbers. These include the impact of claimants delaying their WPI assessments, as well as the number of outstanding Serious Injury application disputes and other WPI disputes that could see claims ultimately meet the 30% WPI threshold.
  - **Life expectancy** – the future life expectancy of Serious Injury claimants has a significant impact on future cost projections.
  - **Cost escalation** – the potential for future cost escalation in a number of medical, care and treatment related items poses a risk. One example is the extent to which care costs that are currently not compensated by the scheme may become compensable in future, as family-based carers age and claimants increasingly require paid attendant care and/or residential care facilities. Another example is the potential increase in costs for care related specialists and facilities, due to wage pressures and/or market demand pressures for these specialists as the National Disability Insurance Scheme continues to scale up.
- **Where claim durations for Short Term Claims will stabilise** – over the last 12-18 months there has been an increase in claim numbers and slippage in return to work outcomes (relative to the much improved RTW rates seen over the preceding few years); the rate of deterioration has increased over the last six months, particularly for claims between one and two years duration. The valuation basis has not fully responded to this most recent deterioration, so some level of improvement is required just to maintain the current liability projections.

  Further, we emphasise that no allowance has been made for increasing numbers of longer duration claims to impact on WPI assessments – that is, we have not anticipated any slippage in

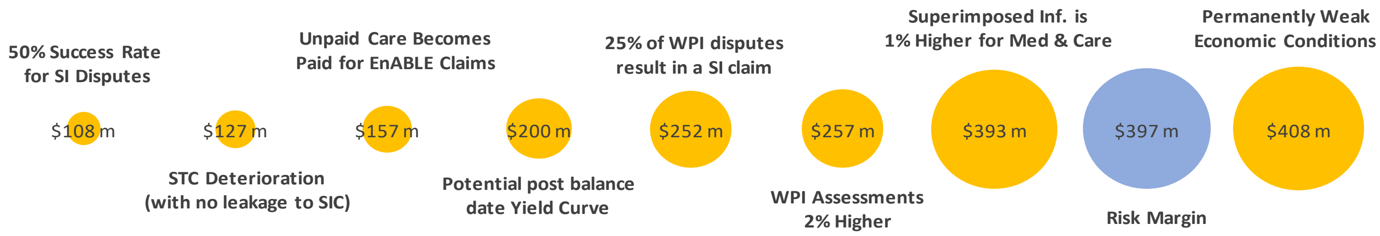
WPI scores, nor any increase in the number of Serious Injury claims, as a result of the increasing claim durations.

- **Outcomes for claims with current disputes** – risks here include the possibility of decisions which are unfavourable to the scheme, as well as the behavioural consequences of so many disputes remaining. Open dispute numbers remain high and more claims are moving into the later stages of the dispute resolution process.
- **Economic environment** – there is considerable uncertainty in financial markets and this is having major (post valuation date) consequences for the discount rates that are used to determine the valuation results. For example, if the valuation results were re-calculated using discount rates at different dates since 31 December (with no changes to any other element of the valuation basis) then liability increases of around $200 million would have occurred on some days; at the time of writing the movements are not as adverse as this, but the level of volatility remains high and it is difficult to anticipate how this will impact over coming months (noting also that ReturnToWorkSA has bonds in its investment portfolio that ought produce somewhat offsetting movements in value).
- **Coronavirus –** our valuation work pre-dates the emerging situation in respect of the COVID–19 Coronavirus, and as such we have not made any allowance for it to impact the claims experience as part of our work. Based only on current media reports, it appears plausible to construct scenarios that would materially impact claim costs if an outbreak were to occur in South Australia – impacts could be direct (by keeping injured workers off work for longer) or indirect (for example by reducing the availability of medical treatment options, or if there are workforce pressures that impact on claim management activity). This situation continues to evolve rapidly and will be responded to as necessary if it begins to impact claim outcomes.

Even though the RTW Act provisions commenced over four years ago, there are still key areas of the Act being tested in the courts, and there is as yet only limited information on the number of Serious Injury claims which will emerge from these cohorts. The current valuation basis reflects our best estimate of how this experience will eventuate. Over time, our basis will further reflect the developing post-reform experience, and it is possible that the experience will differ materially from our current expectations.

To place these uncertainties and risk in context, Figure 3 shows some of the key risks and uncertainties in the projections, as summarised in Section 12 of the report (only the central estimate impact is shown below, given the comparison is to the risk margin), relative to the risk margin adopted in the liability reserves (in blue). The risk areas below are largely independent of each other, so it is possible that a number of these changes could occur at the same time.

Figure 3 – Comparison of Reserving Risk Margin to Key Risks and Uncertainties



As this shows, there is a range of plausible scenarios that could see the liability move by multiple hundreds of millions of dollars. The larger scenarios all depend primarily on Serious Injury claims numbers and/or costs. We observe that while most of the larger uncertainties would emerge over the long term, there are also still ways that a significant increase in the liability reserves could occur more quickly: as explained above, the post-balance date economic environment has been volatile and discount rates have at times moved in ways that would equate to a $200 million liability increase (although at the time of drafting our report they are not as adverse as this), and similarly any adverse legal precedent which increased the number of claims who meet the criteria for Serious Injury benefits would also have immediate consequences for the liability.

9 Reliances and Limitations

Our results and advice are subject to a number of important limitations, reliances and assumptions. This executive summary must be read in conjunction with the full report and with reference to the reliances and limitations set out in Section 13 thereof.

This report has been prepared for the sole use of ReturnToWorkSA's board and management for the purpose stated in Section 1. At ReturnToWorkSA's request, we consent to the release of our report to the public, subject to the reliances and limitations noted in the report.

Third parties, whether authorised or not to receive this report, should recognise that the furnishing of this report is not a substitute for their own due diligence and should place no reliance on this report or the data contained herein which would result in the creation of any duty or liability by Finity to the third party.

While due care has been taken in preparation of the report Finity accepts no responsibility for any action which may be taken based on its contents.

This report, including all appendices, should be considered as a whole. Finity staff are available to answer any queries, and the reader should seek that advice before drawing conclusions on any issue in doubt.

Part II Detailed Findings

1 Introduction and Scope

1.1 Introduction

Finity Consulting Pty Limited ("Finity") has been requested by ReturnToWorkSA to undertake an actuarial review of the Return to Work scheme as at 31 December 2019.

We have carried out half-yearly actuarial reviews since June 2003; the most recent was as at 30 June 2019, and was documented in a report dated 26 August 2019.

1.2 Scope of the Review

The scope of the review is specified in our contract with ReturnToWorkSA.

The primary purpose of the mid-year review is to provide ReturnToWorkSA with an independent estimate of the liability for outstanding claims and projected claim costs for registered (non self-insured) employers. These estimates are used by ReturnToWorkSA to update its financial position, and as an input in determining the average premium rate for the coming year.

The actuarial review also aims to provide analysis of the major features of the recent scheme claims experience, and a projection baseline against which ReturnToWorkSA can manage outcomes and monitor emerging experience in the coming year.

1.3 Compliance with Standards

Professional Standard 302 issued by the Institute of Actuaries of Australia sets out the expectations of actuaries preparing estimates of the liability for outstanding claims of statutory authorities involved in general insurance activities; PS 302 replaced the previous standard PS 300 with effect 1 July 2019. Our valuation, and this valuation report, have been prepared in accordance with PS 302's requirements (refer to Appendix L).

We understand that Australian Accounting Standard 1023 (AASB1023) is adopted by ReturnToWorkSA in preparing its financial statements, and we have prepared our estimate of the outstanding claims to be consistent with our understanding of AASB1023's requirements.

1.4 Control Processes and Review

Our valuation and this report have been subject to Technical and Peer Review as part of Finity's standard internal control process:

- Technical review focuses on the technical work involved in the project. The technical reviewer reviews the data, models, calculations and results, and also reviews our written advice from a technical perspective.
- Peer review is the professional review of a piece of work. The peer reviewer reviews the approach, assumptions and judgements, results and advice.

1.5 Structure of this Report

Section 2	Describes the approach we have taken to the valuation, and provides a brief overview of the information provided to us.
Section 3	Summarises the current operational landscape impacting on the scheme.
Section 4	Summarises high level recent claims experience.
Sections 5 to 9	Detail our analysis of scheme experience and valuation assumptions.
Section 10	Sets out other valuation assumptions, including the economic assumptions of inflation and discount rates, and the risk margins and claim handling expenses adopted in setting accounting provisions.
Section 10.6	Shows detailed tabulations of the outstanding claims valuation results.
Section 12	Provides sensitivity analysis of the valuation to key assumptions and highlights some of the key uncertainties in our projections.
Section 13	Sets out important reliances and limitations.
Section 14	Summarises the key events and changes in the South Australian scheme over time.

The appendices include detailed specifications of the valuation models and results.

Figures in the tables in this report have been rounded. There may be instances where the rounded information does not calculate directly to the total shown.

In this report, we use the current titles “ReturnToWorkSA” and “RTW scheme” to include the previous authority (WorkCoverSA) and scheme (WorkCover scheme), where relevant.

2 Approach and Information

2.1 Approach

The Return to Work Act 2014 (“RTW Act”) made significant changes to entitlements and to the scheme operations, with all of the new features having commenced on or before 1 July 2015. Our estimates of the outstanding claims liabilities allow fully for the expected impacts of the RTW Act.

Under the RTW Act, Serious Injury claims have very different entitlements from other claims. We have modelled these claims separately, with the remaining claims modelled as ‘Short Term claims’. Serious Injury claims are valued using an individual claim based approach by payment type, and Short Term claims are valued using aggregate methods, by payment type.

Table 2.1 summarises where the entitlement and claim cohorts are documented in this report.

Table 2.1 - Report Structure by Claim Cohort

	Short Term Claims	Serious Injury Claims	Other Assumptions	Overall Results
Valuation Basis and Results	Sections 5 to 8	Section 9	Section 10	Section 11
Economic Impacts	Section 10 (basis) and Section 11 (results)			

2.1.1 Basis of the Valuation

Our estimate of outstanding claims is a central estimate of the liabilities. This means that the valuation assumptions have been selected such that our estimates contain no deliberate bias towards either overstatement or understatement. The estimates are shown discounted to allow for the time value of money using a risk free discount rate, consistent with accounting standards.

There is currently considerable ‘legal uncertainty’ in the scheme, and the large number of open disputes and slow rate of dispute resolution present a material risk to the valuation results.

We have also provided information on the recommended provision for outstanding claims which increases the central estimate to a 75% probability of sufficiency, in accordance with ReturnToWorkSA’s reserving policy.

2.2 Information

2.2.1 Standard Data Extracts

Claims data was provided in the form of a transaction file with complete scheme history to 31 December 2019. We have not independently verified or audited the data, but we have reviewed it for general reasonableness and consistency, including reconciliations to the previous actuarial review information and to information from ReturnToWorkSA’s financial statements. The claims data appears to be of high quality and contains extensive detail.

At this valuation, there have been improvements to the coding of injury types for “pending” and previously “rejected” claims. This has led to a re-categorisation of the injury type on some claims and greater accuracy in our claim numbers modelling. We discuss the impacts of this change further in Section 4.

As for previous valuations, our experience analysis excludes all claims related to employers who have become self-insurers (including claims before they became self-insured).

Appendix B shows summaries of the claims data, including data reconciliations.

2.2.2 Qualitative and Additional Information

In addition to the standard data extracts, we obtained additional information from ReturnToWorkSA and its claims agents EML and Gallagher Bassett. This included briefing sessions on 11 December 2019 and operational information that was provided separately.

The additional information we received included:

- Tableau-based monthly monitoring reports showing:
  - Claim reports
  - Payments by benefit type
  - Open, closed and lodged disputes by month
  - Income Support continuance rates and numbers
- Serious Injury claim list containing:
  - All claims that are currently included in our ultimate claims, with the information as to why they have been included
  - Flags to indicate whether they should be valued for Income Support and medical benefits
  - General information pertinent to Serious Injury claims such as determination status and WPI
  - Information on any disputes relating to Serious Injury applications
- EnABLE case estimates covering:
  - Estimated half-yearly costs by payment type
  - The level of care that is currently unpaid (that is, where there is gratuitous care that is generally provided by a family member)
  - Description of the injury and current condition
- Information on WPI assessments including:
  - Completed and in-progress assessments by claim number
  - Disputed assessments by claim number
  - Lump sum payment status of completed disputes
- Information on disputes including:
  - List of open and finalised disputes by accident year and latest disputation phase
- Additional information including:
  - List of Transitional Regulation 5 applications and their current status
  - List of pre-approved surgeries and current status
  - Remuneration projection for 2019/20 and onwards.

3 Scheme Environment

This section summarises changes in the scheme's legislative and operational landscape which are considered in our valuation.

3.1 Legislation

There have been no changes to the scheme's legislation or Regulations which impact on our valuation since the June 2019 valuation.

In the interests of clarity we note that a Bill was introduced to the Legislative Council in December 2019 in relation to post traumatic stress disorder for certain 'first responders'. At this time the contents of the Bill are not part of the Act which governs the scheme and so the potential for this change has not been considered as part of our work.

3.2 Legal Precedent under the RTW Act

Key sections of the RTW Act continue to be tested through the scheme's dispute resolution processes. As has been the case for a number of years, there remains a large number of open disputes, including a higher than usual number of cases on appeal to the Full Bench of SAET and to the Supreme Court, and until these are resolved there will be uncertainty as to the financial costs which eventuate under the RTW Act benefit package.

In summary, our view on the types of cases that are key to the long term operation of the Return To Work scheme that are still to be resolved include:

- 'Combining' of injuries for WPI assessment and lump sum purposes – there remains many claims in various stages of the dispute resolution process that relate to the WPI assessment rules.

  While it was previously expected that the number of such disputes would reduce once key cases were resolved, the experience since the *Mitchell* case suggests that this will not be the case and that the slow rate of resolution will continue as each dispute is heard on its merits.
- Whether employment is the significant cause of secondary injuries or injuries away from the workplace – these types of cases have the potential to extend the benefit eligibility period beyond the 104 week cap by 're-starting the clock' on account of a new injury having occurred.
- The reviewability of decisions and validity of past agreements and consent orders.

Given the slow rate of dispute resolution, it is likely that it will still be at least another two years, but probably longer, until there is confidence about how the various RTW Act legislative provisions apply in practice. In some areas it may take years before all areas of outstanding issues are resolved.

For completeness we also note there was question of law decision in relation to the territorial application of the RTW Act[1], whereby a Mr Firkins was found to be covered by the RTW Act even though he had never worked or resided in South Australia. Whilst at face value this appears to have the potential to dramatically expand the coverage of the scheme, we are advised by ReturnToWorkSA that the circumstances of the case (in relation to the company structure and employment relationships) were unusual and so it is not expected that this case will lead to any real change in the coverage of the scheme.

[1] Firkins v ReturnToWorkSA & BAE Systems Australia Limited [2019] SAET 231

3.3 Operational and Environmental Changes

This section describes recent trends in the scheme environment. Section 14 provides an overview of earlier operational and legislative changes which are useful in understanding the scheme's historical experience.

3.3.1 Evolution of the Claims Management Model

Earlier Identification of Potential Serious Injury Claims

Over the last two years ReturnToWorkSA has progressively improved its claims management approach to identify 'likely' Serious Injury claims much earlier. This allows targeted activity to take place earlier in the claim and helps to ensure that those with the most serious injuries do not 'slip through the cracks' due to incomplete or unresolved WPI assessments.

While there (necessarily) still remains a high degree of uncertainty as to the ultimate number of Serious Injury claims who will emerge over time, particularly given the slow process to complete WPI assessments and resolve disputes, the earlier identification of most serious injuries is a positive step.

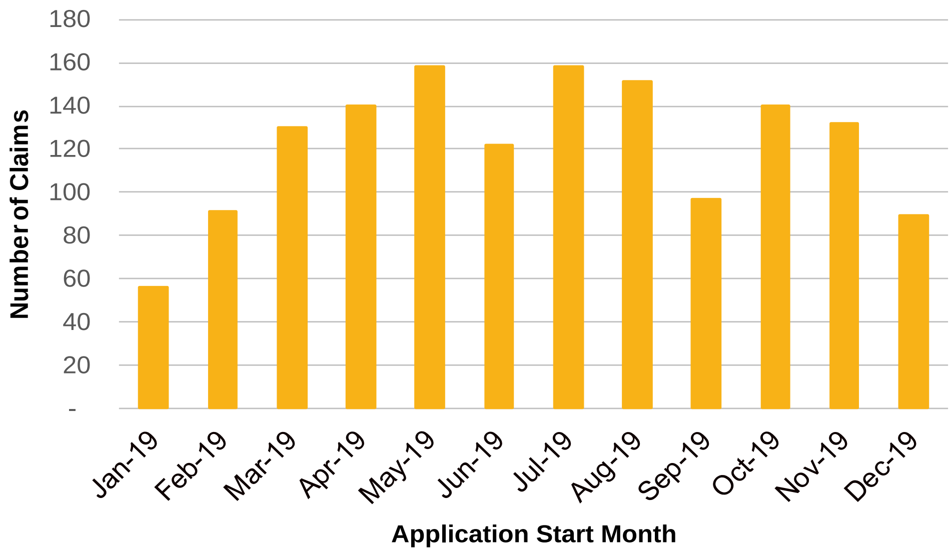
The impact of this change on observed Serious Injury claim numbers is discussed further in Section 4.2.

Resolution of Transition Claims

A major program of work commenced in early 2019, whereby ReturnToWorkSA and their claims agents have been proactively working with claimants to try and resolve as many outstanding WPI assessments as possible (subject to the claimant being ready to proceed with the WPI assessment). Delays in completing WPI assessments and/or resolving related disputes, particularly as a result of the need to await key legal precedent, has meant that some claims have had to wait longer for lump sum payments than was historically the case.

Figure 3.1 shows the number of transitional claims commencing a new WPI assessment application since 2019 under the transitional claims project.

Figure 3.1 – New Applications for WPI Assessments (Transitional Claims only)



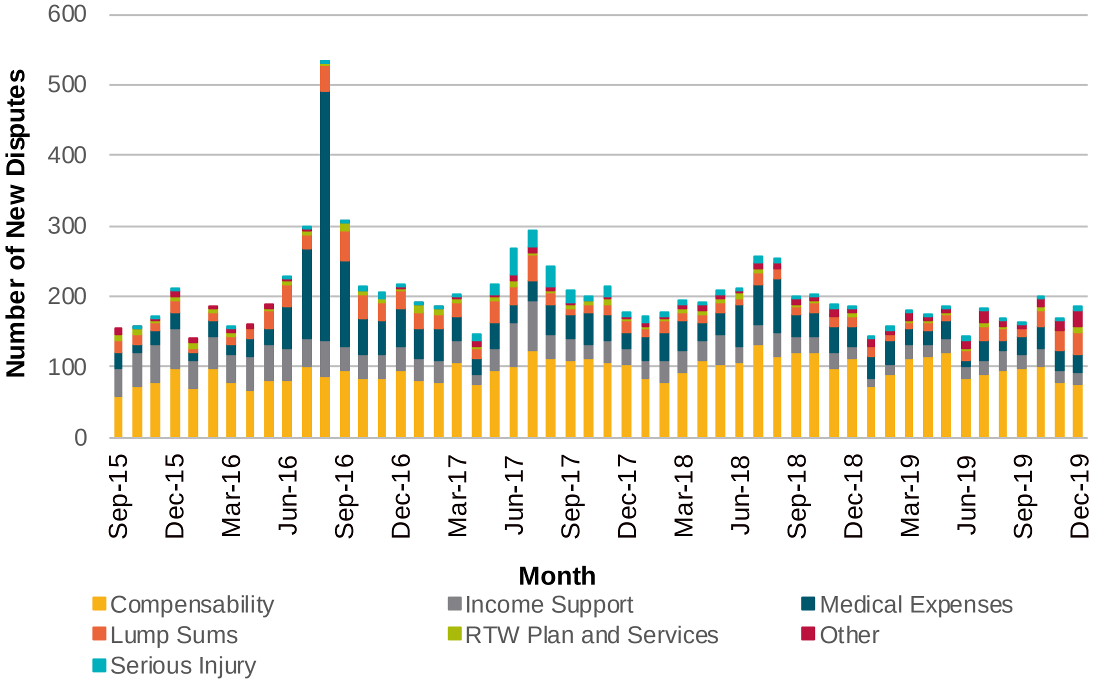
As this shows, the volume of transitional claimants still commencing WPI applications continues to be high (remembering that these claims all have injury dates prior to June 2015). Given this, it is likely to be at least another six months (and possibly longer) until the tail of new applications reduces down to a more negligible level.

This work should help to crystallise the number of lump sum claims that remain from 'old-Act' injury periods, and it will also resolve legacy Serious Injury disputes; although on current trends this will take quite a while, as cases seem to be more inclined to go to hearing (and, further still, appeal rates have been higher than was historically the case, which is further delaying the resolution of these older claims). The lump sum valuation basis is discussed further in Section 6 and Serious Injury claim numbers are discussed in Section 4.2.

3.3.2 Dispute Numbers and Dispute Resolution

Since the RTW Act commenced in mid-2015, dispute numbers have tended to be between 150 and 200 new disputes per month, although there have been a number of 'spikes' as key boundaries commenced: medical expenses disputes spiked after June 2016, due to a significant number of disputes around future surgery applications, and Serious Injury disputes increased around June 2017, as shown in Figure 3.2.

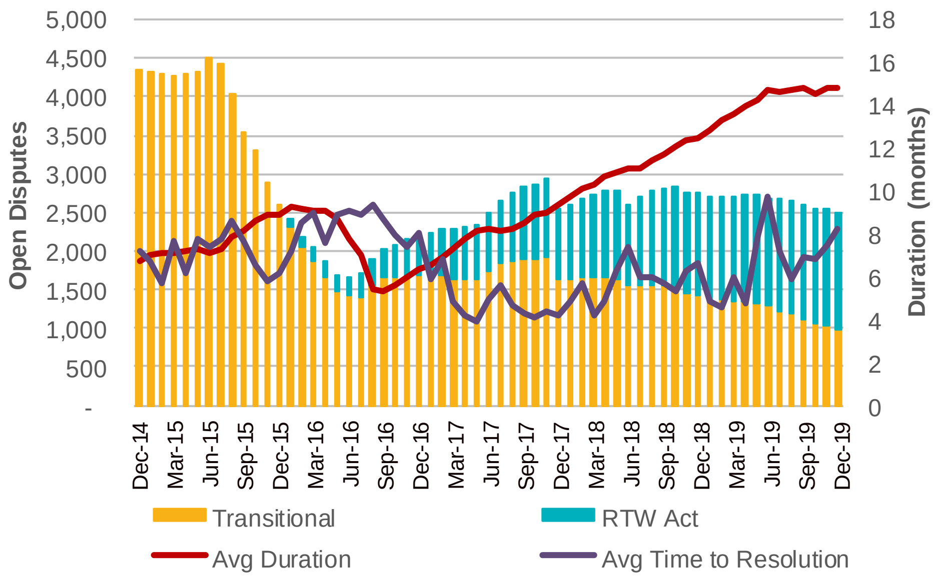
Figure 3.2 – New Disputes by Dispute Type (monthly)



While it currently appears that current dispute numbers have stabilised at below 200 disputes per month, which would be a more favourable result than under the 'old Act', we caution that with the WPI assessments still to be completed on many claims it is possible that RTW Act dispute numbers will still increase somewhat.

Compounding this continuation of new disputes is the timeframe to resolve disputes, which has lengthened considerably. The result is that the number of open disputes remains high. Figure 3.3 shows the number of open disputes over time, split between RTW Act claims and transitional claims, and the duration of open and finalised disputes.

Figure 3.3 – Open Dispute and Duration



Our observations are:

- The level of open disputes has stabilised at around 2,500 disputes, with growing RTW Act claims replacing finalised transitional claims. This indicates the new scheme is not yet at a 'steady state' for disputes. There is still uncertainty as to the ongoing level of disputes under the RTW Act and the impact of these disputes on claim outcomes.
- There are still around 1,000 disputes open for transitional claims.
  - Four and a half years after the RTW Act commenced we are now more consistently seeing this number reducing, however there are still new disputes commencing from transitional claims, and this group continues to represent a material risk to our liability estimate.
  - The open dispute count on transitional claims reduced by 200 disputes in the last six months, and at this rate it will still be 2 to 3 years before there are negligible transitional disputes left.
- The duration for open disputes has more than doubled since July 2016, from around seven months to close to 16 months. The duration for finalised disputes has grown at a more modest pace, suggesting the more complex and costlier disputes have yet to settle.
- Since Income Support benefits for most claims are capped under the RTW Act, even an 8-10 month dispute resolution timeframe is considered slow.

3.3.3 Potential for New Silicosis Claims

Following high numbers of new interstate silicosis claims from the benchtop industry, where silica is a key component in the new range of 'engineered stone' benchtops, a project has been underway in South Australia to screen for these types of claims among higher risk workers.

We are advised by ReturnToWorkSA that this screening program has led to the diagnosis of 22 workers with forms of silicosis or lung disease, although at this stage none of these 22 workers have lodged a workers compensation claim. We observe that this is an increase from the number of known affected workers at the previous valuation (where there were three potential silicosis claims that had been identified, only one of which was confirmed as being related to engineered stone).

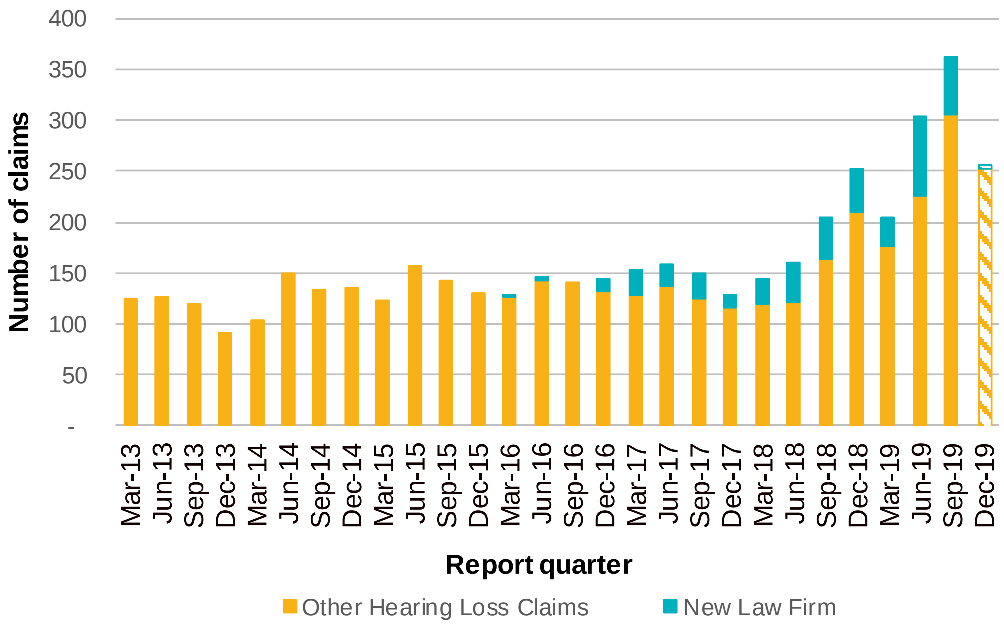
At this time we have not made any additional allowance in the central estimate liability on account of these 22 diagnoses, given they appear to be (currently) at the lower severity end for these types of illnesses, but we will continue watching and gathering further information as it becomes available. The potential for any additional costs are included in our risk margin considerations.

Even with the growth in diagnoses over the last six months, this is still much lower than the numbers of impacted workers that have been identified in the Eastern states. We were previously advised that this is believed to be a genuine difference, which is being attributed to a lower use of engineered stone in South Australia along with a correspondingly smaller workforce (for example, some suppliers will order in the benchtops from interstate).

3.3.4 Increasing Numbers of Hearing Loss Claims

Noise induced hearing loss claims are only a small proportion of total claim numbers, but they have been growing rapidly – partly this has been a long term trend, but more recently this appears to be the result of targeted provider activity. Figure 3.4 below shows the number of new Hearing Loss claims by report half year, split to show the contribution of a new legal provider to these types of claims[2]. It is important to point out that the latest half-year is likely to be understated as there are delays in getting injury codes assigned that mean some claims that are currently 'unknown' injuries will in time be recognised as a Hearing Loss claim.

Figure 3.4 – Hearing Loss Claims by Legal Provider



The key features we note are:

- There has been strong growth in hearing loss claims in the last two years. While a good part of this growth is from the new law firm, it appears that Hearing Loss claims have increased from other sources as well.
- The December 2019 quarter is currently showing as a break in the upward trend, however based on current information and the historical patterns of injury code backdating, we expect this will end up at a similar level to the September 2019 quarter when it is measured again at June 2020.

[2] The law firm can only be identified when a payment is made, so 'backdating' will occur over time, particularly so for the last few quarters.

Based on the above information, and following more detailed discussions with ReturnToWorkSA and its claims agents, we have further increased the projections relating to Hearing Loss claims as discussed in Section 4.1.2 and Section 6.3.

4 Recent Claims Experience

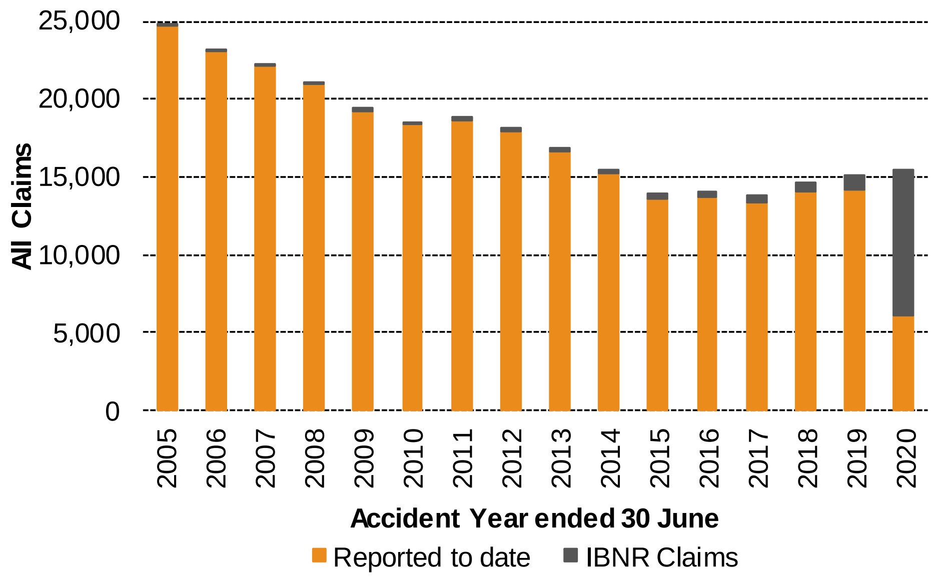
This section provides a high level analysis of scheme experience, including the numbers of new claims and overall payment trends.

4.1 Claim Incidence

4.1.1 All Claims

Figure 4.1 shows the estimated numbers of claims incurred in recent accident years (excluding reports which are determined as 'incidents'). The graph separates the actual numbers reported to date and our projection of claims incurred but not yet reported (IBNR).

Figure 4.1 – Ultimate Number of Claims (All Claims)



The key feature of the recent experience is an increase in claim numbers since 2017 after a long term general downward trend. There are three primary factors driving the recent higher claim numbers:

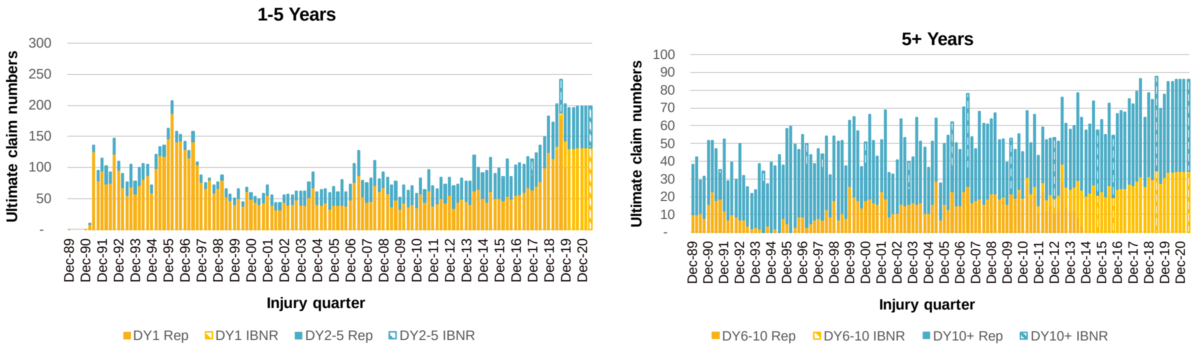
- Claim frequency deterioration: the construction and manufacturing industries, in particular, experienced an increased claim frequency trend in recent years
- Strong growth in the number of hearing loss claims, as explained further below
- Higher exposure growth in 2018 and 2019 after an extended period of lower wages growth. This growth does not appear to be continuing into 2020.

Our estimate of ultimate numbers for 2019 has decreased by around 1% since the previous valuation. Our current estimate for 2019 is 3% higher than the estimate for 2018, and the estimate for 2020 is 2% higher again.

Impact of Hearing Loss Claims

There has been a significant increase in the number of hearing loss claims reported over the last 18 months as discussed in Section 3.3.4. Projecting the ultimate number of claims is inherently challenging for hearing loss claims, given the long delays that can occur between the 'noisy work' and lodgement of a claim, and this is compounded by the changes in claiming behaviour that is currently occurring. Table 4.1 below shows our projected ultimate number of hearing loss claims by duration.

Table 4.1 – Ultimate Hearing Loss Claims (by Duration since injury)



Our analysis suggests that at least some of the increase in claims is due to a bringing forward of reports; that is, older workers who would not have claimed until they were (say) 75 are now claiming at (say) age 65 as a result of the increased awareness of the workers compensation benefits. Ultimately though this interpretation is judgmental, and so it is possible that we will need to further increase the hearing loss projections if the large number of reports we are currently seeing continues.

In line with our interpretation that there is an element of bringing forward in the latest claims experience, most of the increase in hearing loss claims comes through in the first five years of development. We have also allowed for a marginal increase to flow through to the tail of reports beyond development year five, however the allowances here are well below the current level of reports.

4.1.2 Income Support Claims

Income Support (IS) claims are those who receive more than 10 days of lost time benefits.

Figure 4.2 shows our projected ultimate numbers of IS claims, split into those who have already received an IS payment and those who are expected to receive their first IS payment in future (IBNR).

Figure 4.2 - Ultimate IS Claim Numbers

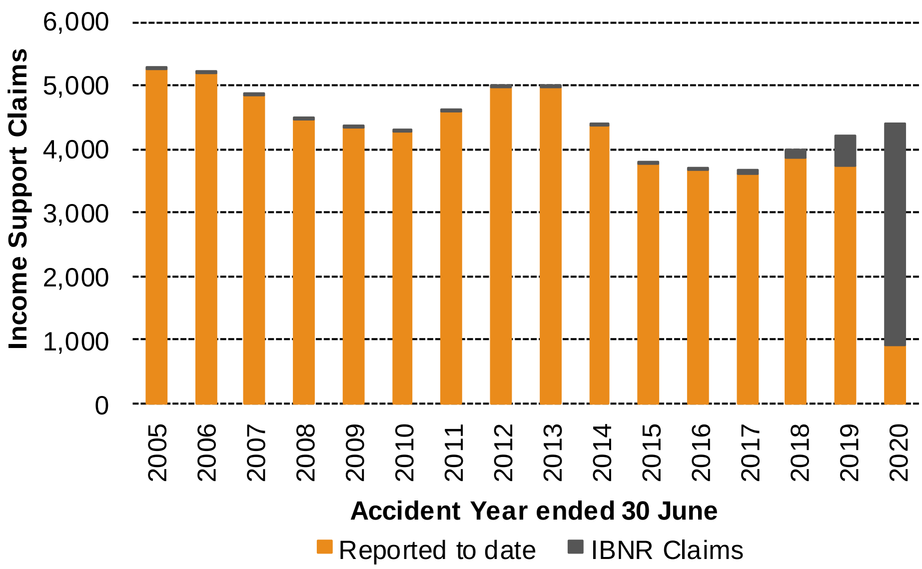


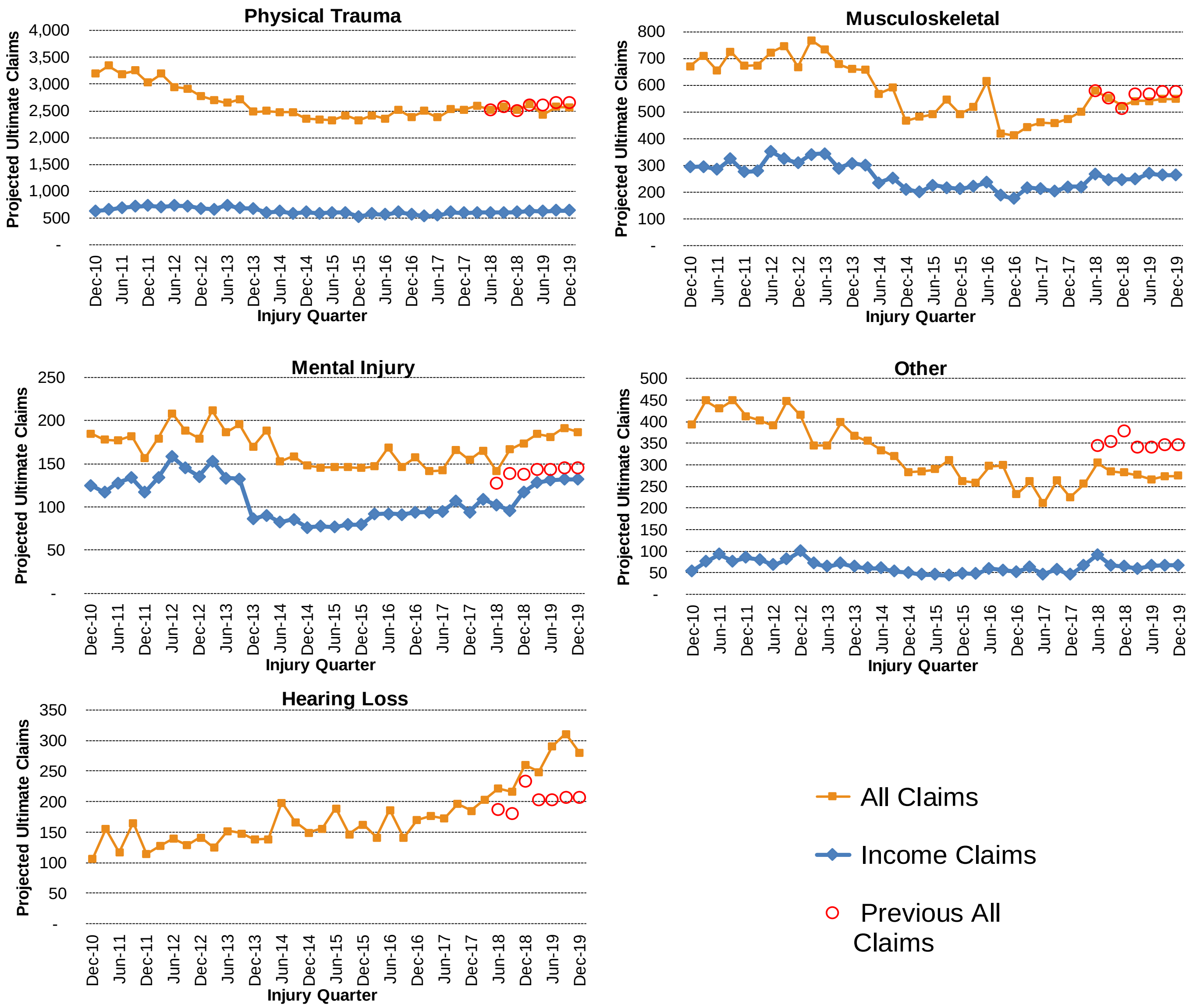
Figure 4.2 shows:

- IS claim numbers dropped by 17% between 2006 and 2010, and then rose again over the next two years to sit at about 5,000 claims per annum in 2012 and 2013
- IS claim numbers reduced again in 2014 and in 2015, and were then stable at around 3,750 per annum for three years; this experience represents the lowest level since the scheme commenced
- Since 2017 IS claim numbers have risen quite rapidly. The estimate of IS claim numbers for 2018 is 9% higher than 2017, 2019 estimate is 5% higher than 2018 and the estimate for 2020 is 4% higher again.

As seen in the graph, considerable development of claim numbers is still expected for the latest accident year, and there is significant uncertainty around the ultimate outcomes for this year.

In order to better understand the trends in IS claim numbers, we separately model claim numbers by type of injury. Figure 4.3 shows, by injury type, the total numbers of claims as well as IS claim numbers. As explained in Section 2.2.1, at this valuation there has been an improvement in claim coding which allows (mainly) mental injury and hearing loss claims to be identified faster, as well as capturing some claims that previously fell into the 'Other ' category. This change does not affect the overall number of claims and can be observed in Figure 4.3 as level shifts between previous ultimate claim numbers and current projections for the 'Hearing Loss', 'Mental Injury' and 'Other' claim groupings. The coding change also impacts the reporting pattern of claims, as we can now see some mental injury and hearing loss claims earlier than before.

Figure 4.3 – All Claims and IS Claims by Type of Injury



The key features we note from Figure 4.3 are:

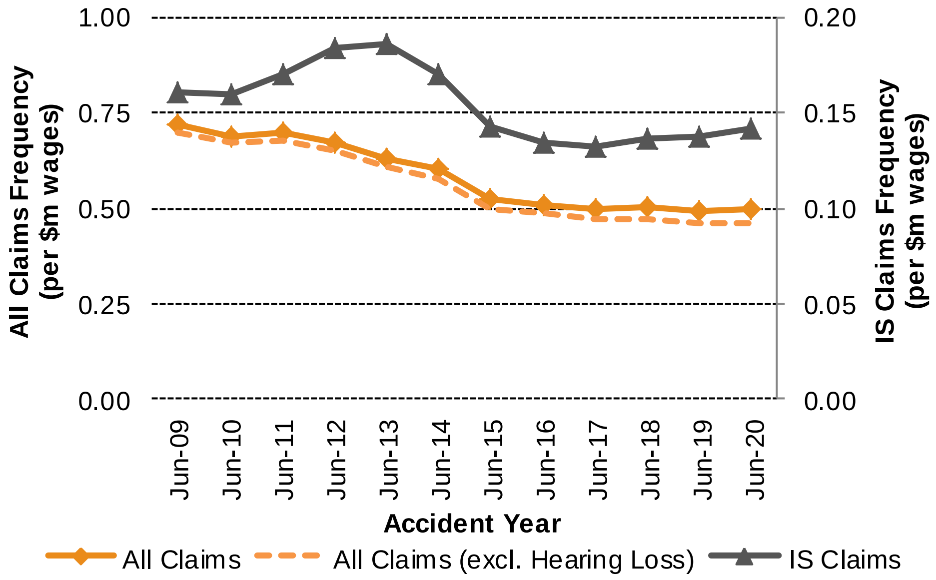
- As a result of the improved data coding, there are one-off changes to:
  - Hearing Loss: this highlights that the upward trend has not only continued, but that it now appears to be even steeper than previously thought
  - Mental Injury claims: similar to Hearing Loss claims, it is now apparent that the number of new reports has been increasing whereas the previous data appeared to show stable numbers of reports. The increasing number of 'All Mental Injury' claims is now more consistent with the upward trend in Mental Injury claims getting Income Support payments
- There is a gradual upward trend in IS claim numbers over the past three to four years, which is particularly prominent for Musculoskeletal and Mental Injury claims
- Overall claim numbers for Physical Trauma and Musculoskeletal injuries have emerged slightly better than previously projected. It appears that claim numbers have flattened off for these two segments, after a period of growing numbers.

The mix of claims by injury type has important implications for long term IS claim costs, as claims of these types have longer average durations than IS claims overall. As such, on top of IS claim numbers increasing across the board, the growth in claim cost is likely to outpace growth in numbers as the mix skews towards these higher cost claim types.

4.1.3 Claim Frequency – All Claims and IS Claims

Figure 4.4 compares the trends in (1) total claim frequency ('all claims' numbers from Section 4.1.1), (2) total claim frequency excluding hearing loss claims and (3) IS claim frequency (IS numbers; Section 4.1.2). The frequencies are expressed relative to covered scheme wages (in current values). The two series are shown on different scales so the trends can be directly compared.

Figure 4.4 – Claim Frequency (Claims per $m wages)



The IS claim frequency was on a similar trend to the all claims frequency prior to 2010, before diverging between 2010 and 2013. After the steep improvement in the IS claim frequency between 2013 and 2015, trends in the IS claim and all claim frequencies were broadly in line until 2018, when the IS claim frequency began to deteriorate again, as it has continued to do since. The current flat trend in the all claim numbers frequency is a product of growth in hearing loss claims offset by reducing claim frequencies in other claim types, which is broken down further in Table 4.2.

Table 4.2 – Projected Ultimate Claim Frequency: Comparison to Previous

	All claims				All claims (excl. hearing loss)			
Accident Year	Claim Freq (per $m of wages)	Year on Year % Change	Prev. Freq	Change from Prev	Claim Freq (per $m of wages)	Year on Year % Change	Prev. Freq	Change from Prev
Jun-17	0.50	-2%	0.50	-0.5%	0.47	-3%	0.48	-0.9%
Jun-18	0.50	1%	0.51	-1.1%	0.47	0%	0.48	-1.7%
Jun-19	0.49	-2%	0.51	-2.6%	0.46	-3%	0.48	-4.0%
Jun-20	0.50	1%	0.51	-3.0%	0.46	0%	0.48	-5.2%

Overall, we have reduced our ultimate claim frequency estimates since the previous valuation. This is due to a combination of around 5% reductions on claims other than Hearing Loss, which is partially offset by the continued strong growth in Hearing Loss claims.

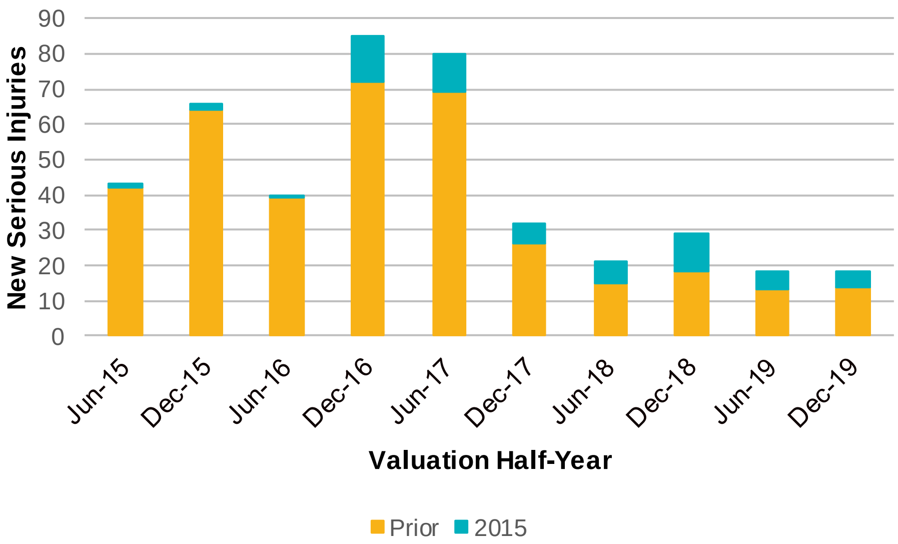
4.2 Serious Injury Claims

Serious Injury claims, which require an assessment of at least 30% WPI, is the most material scheme boundary from a financial perspective.

The formal process for recognising a claim as being a Serious Injury is a determination by ReturnToWorkSA once a claim is assessed as having a WPI of 30% or more. For our valuation work we also consider claims that are not yet formally determined as being a Serious Injury but who are expected to become so in future. We do this by using information on claims identified as 'potential' Serious Injury claims, based on profiling and review work by ReturnToWorkSA which uses the medical and claims file evidence (for example, information on the injury and any need for future surgeries) on a claim by claim basis. The list of likely Serious Injury claims is updated over time as claims are re-reviewed, such as when there is a change in the claim situation that suggests a claim will or won't meet the 30% WPI threshold; all claims are ultimately confirmed as either meeting or not meeting the requirements to be considered a Serious Injury.

We are now over four years into the RTW Act, and the emergence of Serious Injury claims from the transitional cohort has continued for longer than expected. Even though very few pre-RTW Act claims are still in receipt of Income Support payments, Serious Injury claims continue to emerge and the number of open Serious Injury application disputes and/or unresolved WPI disputes remains high. We are now also seeing similar types of behaviour from RTW Act claims, meaning that there continues to be uncertainty around Serious Injury claim numbers well beyond when claims hit the two year Income Support boundary. Figure 4.5 shows the emergence of the current cohort of Serious Injury claims for transitional periods (excluding Severe Traumatic injuries as these tend to be identified quickly).

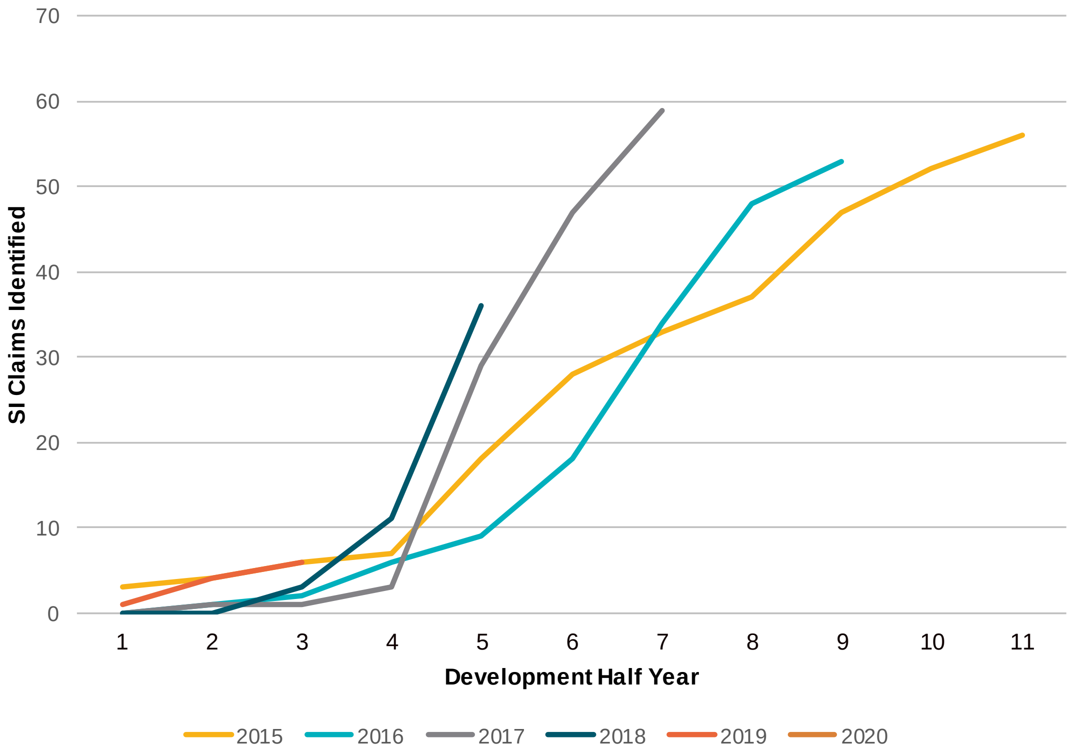
Figure 4.5 – Newly Identified Serious Injury Claims, split by Accident Period Cohort (Transitional claims only)



Although new Serious Injury claims for transitional periods have been lower since 30 June 2017, the run-off since this point has been very slow, with an additional 18 claims in the last six months identified as a Serious Injury claim. In previous valuations the number of newly identified Serious Injury claims has been partially (but not fully) offset by the removal of some claims from the 'potential' group as additional information became available. Given the size of the 'potential' cohort continues to reduce, any continued late identifications beyond the valuation allowances will likely result in a net increase for transitional periods.

For RTW Act periods the emergence of Serious Injury claims continues to quicken, following changes ReturnToWorkSA has made to the claims management model to aid early identification as was discussed in Section 3.3.1. This is shown in Figure 4.6 below.

Figure 4.6 – Serious Injury Emergence for Recent Accident Years



The combination of continued late Serious Injury identification (well beyond the two year Income Support cap) and the change in the speed of emergence for more recent accident years means it is challenging to estimate ultimate numbers based on historical patterns.

Further complicating this is the legal environment with key parts of the RTW Act still being tested and legal precedent being slow to emerge. Relating to this, following the favourable *Mitchell* decision ReturnToWorkSA has advised us that their interpretation regarding combining surgery related injuries will be different in future (to align with the *Mitchell* decision). This new interpretation will not allow for the inclusion of surgery related injuries on parts of the body that are not related to the initial injury to be considered in the WPI assessment. This change will lead to fewer claims reaching the Serious Injury threshold; for clarity we note that claims that have already been determined or interim determined will not be affected by this change, as only new Serious Injury applications will be assessed using this interpretation.

To assess the potential impact of this revised interpretation ReturnToWorkSA has reviewed all currently identified Serious Injury claims from the 2014 to 2016 accident years to see if they would have still reached the Serious Injury threshold. This review indicated that this new interpretation would remove around five claims per accident year[3]. We note that this interpretation is yet to be tested through the dispute resolution process, although ReturnToWorkSA are confident in it given it flows directly from the Full Court's *Mitchell* decision.

[3] All claims that were identified as not meeting the Serious Injury threshold under this new interpretation have been flagged to assist in setting future claim numbers, even though there is no change to the Serious Injury status for those specific claims. That is, while they will still be valued as part of the liability, we will manually remove these claims when considering the underlying future level of new Serious Injury claims.

Given this, our approach to setting ultimate Serious Injury numbers uses a similar framework to previous valuations:

1. For 2017 and prior accident years the IBNR is an explicit allowance, based on the number of claims with either a Serious Injury application or WPI activity initiated (which we then add to the identified Serious Injury claims to give the ultimate). The approach for these periods is unchanged from the previous valuation with the following exceptions:

    (a) We have reviewed some of our conversion assumptions in light of actual experience over recent valuations

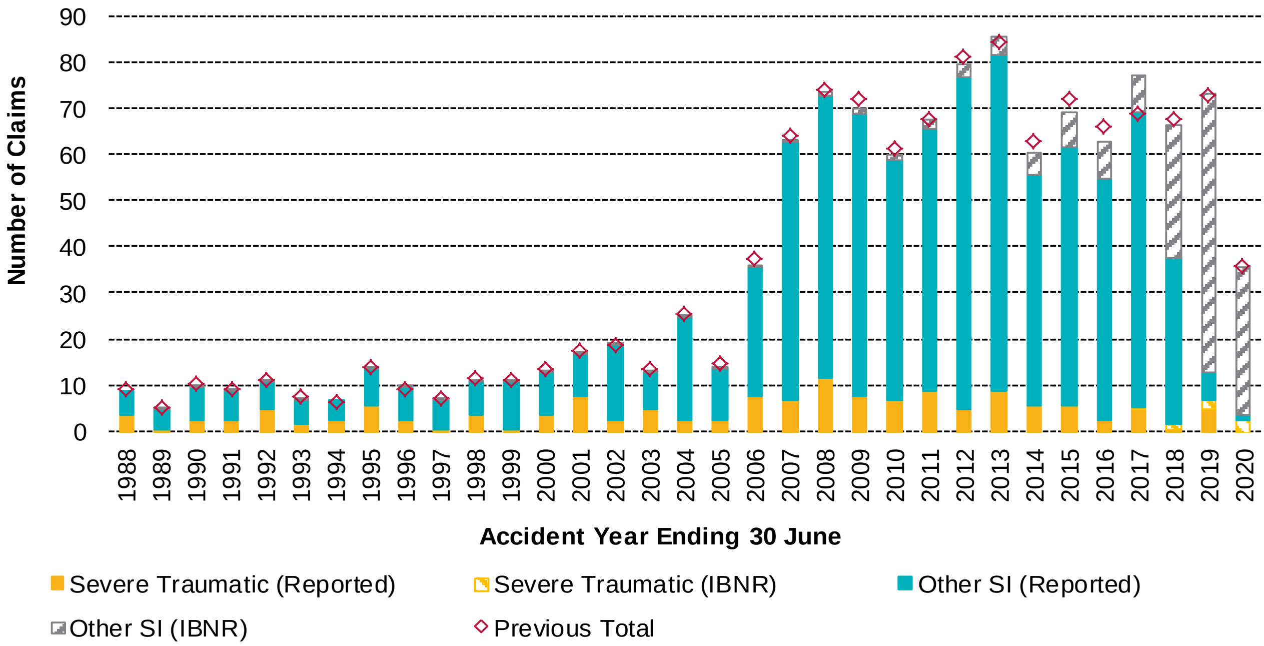
    (b) Our allowance for future Serious Injury claims arising from surgery has been reduced in light of ReturnToWorkSA's interpretation post-*Mitchell*

2. For 2018 and later accident periods, we have set the ultimate number of claims equal to the average of the 2016 and 2017 accident years excluding claims that were identified by ReturnToWorkSA as not meeting the new interpretation of the Serious Injury threshold, with an allowance for exposure growth and the impact of safety initiatives.

    Importantly, this approach implicitly assumes that the current deterioration in RTW durations for short-term claims will not translate to more or higher WPI assessments.

Figure 4.7 shows our resulting estimated numbers of Serious Injury claims by accident year.

Figure 4.7 – Serious Injury Claim Numbers by Accident Year



The key features we note from this are:

- The number of recognised Serious Injury claims prior to 2007 is low, which is a result of past redemption activity removing such claims from the scheme.
- For Severe Traumatic Injuries, which tend to be identified quickly, the estimates for each accident year generally give credibility to experience to date. The 2018 year looks like being a very low year for Severe Traumatic Injuries, whereas the 2019 year looks higher than average.
- For 2013 and prior accident years there has been little change to the ultimate number of claims

- For the 2014 to 2016 accident years the estimate of ultimate Serious Injury claims has decreased slightly. This is a result of a lower allowance for surgeries to lead to claims reaching the Serious Injury threshold due to ReturnToWorkSA's post-*Mitchell* interpretation, rather than an indication that our previous basis was too high.
- The 2017 accident year ultimate has increased by eight claims in response to the high number of claims that have already been identified. We observe that the 2017 accident year was prior to the deterioration on short-term claims so this increase is not linked to the recent increases in short-term claim durations.
- 2018 and later accident years are pegged to the 2016 and 2017 years with an allowance for the change in interpretation, growth and the impact of safety initiatives.

Overall we have allowed for 135 IBNR claims in our projections, which equates to 1.9 injury years' worth of claims.

To put our allowances for Serious Injury claim numbers into context, we compare the IBNR allowance with the number of claims sitting in each 'IBNR pool' and other remaining open claims in Table 4.3 below.

Table 4.3 – Serious Injury IBNR vs Remaining Open Claims (pre-2017 accident years)

Accident Period	SI Application[1]	WPI Activity[2]	Other Open	Total Open Claims	Serious Injury IBNR	IBNR %
Prior	9	105	298	412	4	0.9%
2007	4	17	28	49	1	2.0%
2008	4	14	16	34	1	3.9%
2009	9	15	19	43	2	5.6%
2010	7	25	29	61	1	2.3%
2011	7	32	49	88	2	2.2%
2012	9	28	40	77	3	3.8%
2013	13	52	91	156	4	2.4%
2014	15	81	174	270	5	1.8%
2015	22	111	214	347	7	2.1%
2016	25	215	766	1,006	8	0.8%
2017	17	312	1,210	1,539	13	0.8%
Total	141	1,007	2,934	4,082	51	1.3%

[1]Either in SI application dispute, or recent application without decision

[2]WPI assessment not completed, or WPI/s7 dispute

While we continue to believe that the approach to setting Serious Injury ultimate numbers for 2017 and prior periods is appropriate given the information available, Table 4.3 highlights the implication of our results – that is, that only a very low proportion of remaining open claims are anticipated to reach the Serious Injury threshold. In particular, 2016 and 2017 (which are used as the baseline for setting assumptions on RTW Act periods) only has an allowance of 21 IBNR claims, which equates to 0.8% of all currently open claims reaching the Serious Injury threshold. It would only take small deviations from this to have large consequences on the outstanding claims liability (and average premium rate). Given the reducing proportion of 'potential' claims from these periods, that have to date provided some offset to newly determined Serious Injury claims, there is more risk that our IBNR could be too low rather than too high.

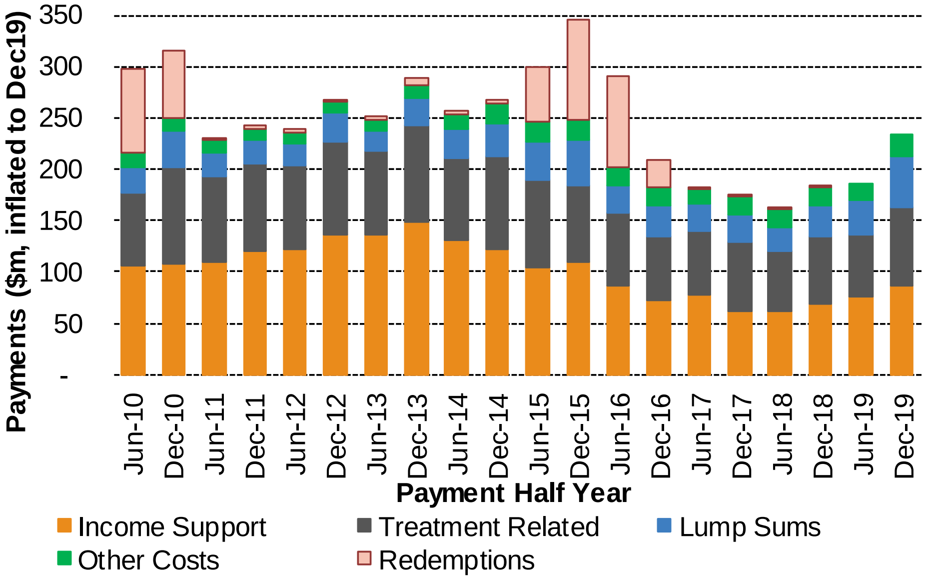
For accident years after 2017 ultimate Serious Injury numbers (excluding Severe Traumatic Injuries) are set in line with the average of 2016 and 2017, with an allowance for lower future Serious Injury claims arising from surgery and some exposure growth. While we assess that this is the best approach we can take for now given the limited information to date, it places a high level of reliance on the 2016 and 2017 accident years which themselves are still not fully developed, and further, this approach does not take into account any differences in the profile or management of claims from different periods, and so there is an implicit underlying assumption that the recent deterioration in short-term claims performance only affects the duration of those claims (subject to benefit caps) and won't result in higher WPI scores.

Any adverse legal decisions that lead to more claims getting higher WPI scores would be likely to materially increase Serious Injury claim numbers. Given the high value of Serious Injury benefits, higher than expected Serious Injury claims would materially increase the liability.

4.3 Overall Payment Experience

Figure 4.8 shows gross claim payments (before recoveries) in half-yearly periods over the last ten years, inflated to current values.

Figure 4.8 – Gross Claim Payments ($Dec19)



Gross payments of $231 million in the last six months were up 25% from the previous period. There was mixed experience by payment type:

- Income Support payments increased by 16% in the last six months, following increases of 9% in the previous six months and 11% in the six months before that. These increases follow a series of steady reductions between 2013 and 2018.
- Treatment related costs increased by 25%, after a 6% reduction in the previous period.
- Lump sum payments have seen a third consecutive increase (51% in this six months, following increases of 11% and 26% the two previous half years), after being relatively low for 2.5 years.
- Redemption activity has now ceased under the RTW Act.

After allowing for recoveries of $7.6 million in the last six months, net claim payments of $224 million were $13.8 million (7%) higher than projected at the previous valuation. Table 4.4 shows the breakdown.

Table 4.4 – Payments: Actual vs Expected

Entitlement Group	Six Months to Dec-19 Actual	Expected	Act - Exp	% A - E	Split by Category Short Term	Serious Inj
	$m	$m	$m		$m	$m
Income support	86.1	73.2	12.8	18%	10.3	2.6
Lump sums	50.0	55.7	-5.7	-10%	3.3	-9.0
Worker legal	8.3	6.9	1.3	19%	0.8	0.5
Corporation legal	10.4	10.0	0.3	3%	0.5	-0.1
Medical	40.2	36.0	4.2	12%	4.6	-0.5
Hospital	10.7	10.0	0.7	7%	-0.2	0.9
Travel	3.5	2.9	0.6	20%	0.4	0.2
Rehabilitation	7.4	6.1	1.3	21%	1.3	-0.1
Physical therapy	5.5	5.1	0.5	9%	0.4	0.0
Investigation	1.0	1.1	-0.1	-7%	0.0	-0.1
Other	8.4	6.9	1.5	21%	0.2	1.3
Common law	0.0	0.2	-0.2	-100%	-0.2	0.0
LOEC	0.1	0.1	0.0	0%	0.0	0.0
Commutation	0.0	0.2	-0.2	-100%	-0.2	0.0
Gross Payments	231.4	214.4	16.9	8%	21.1	-4.2
Recoveries	-7.6	-4.5	-3.1	70%	-2.3	-0.8
Net Payments	223.8	210.0	13.8	7%	18.8	-4.9

The key features of the last six months' payment experience are:

- Income Support payments were $12.8 million (18%) higher than expected; payments were above expectations for most accident periods
- Lump sum payments were 10% lower than expected due to lower payments from Serious Injury Claims
- Treatment costs were much higher than expected, which includes a flow-on impact from the higher number of claims receiving Income Support.

Our valuation basis for Short Term claims is discussed in the following sections: Income Support and related expenditure in Section 5; Lump sums in Section 6; treatment related expenditure in Section 7 and all other entitlements in Section 8. Section 9 discusses our valuation of Serious Injury claims.

5 Income Support – Short Term Claims

This section describes our valuation of Income Support (IS) payments for Short Term Claims (STC) only.

5.1 Summary of Results

Table 5.1 summarises the movements in our liability estimates for IS payments since the June 2019 valuation.

Table 5.1 – Valuation Results: Income Support

Jun-19 Valuation	$m	$m	$m
Estimated Liab at Jun-19	142.3		
Projected Liab at Dec-19	143.4		
Dec-19 Valuation		AvE pmts	Actl Release
Impact of experience/OSC - valuation release	26.4	10.3	(36.7)
Estimated Liab at Dec-19 (Jun-19 eco assumptions)	**169.8**		
Impact of change in eco assumptions	0.1		
Estimated Liab at Dec-19 (Dec-19 eco assumptions)	**169.9**		

At December 2019 there is an actuarial strengthening of $36.7 million, reflecting the claims experience since June 2019 and our valuation response. The actuarial strengthening comprises an increase of $26.4 million from the liability estimate and $10.3 million due to higher than expected claim payments over the past six months.

The impact of economic assumptions is minor for the Short Term claim IS payments; economic assumptions are discussed in Section 11.3.2.

5.2 Experience vs Expectations

5.2.1 Payments

Table 5.2 compares the IS payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 5.2 – Actual vs Expected Payments: IS

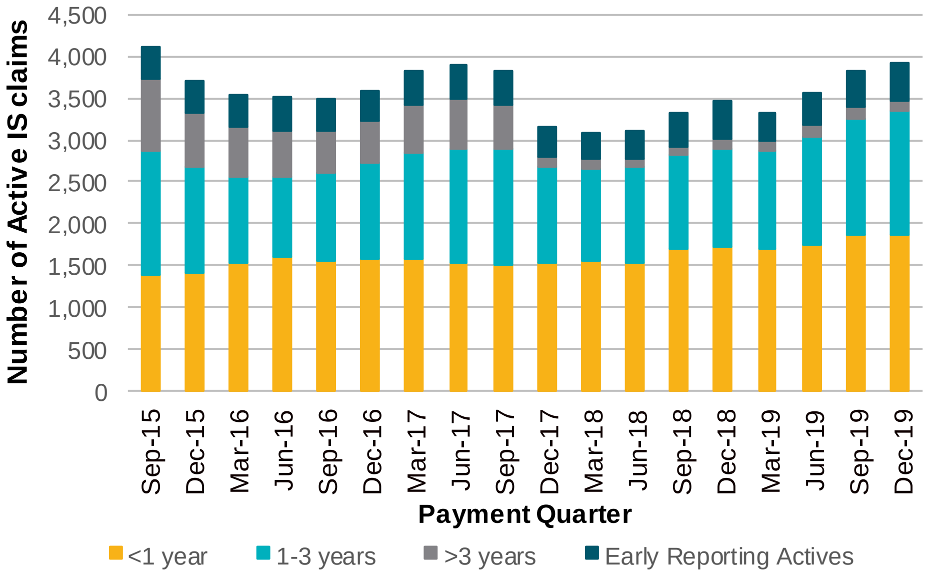
Accident	Payments in Six Months to Dec 19			
Period	Actual	Expected	Act - Exp	Difference
	$m	$m	$m	
To 30 Jun 05	0.3	0.3	0.0	7%
2005/06 - 2014/15	1.9	1.3	0.5	40%
2015/16 - 2016/17	3.4	2.1	1.3	62%
2017/18 - 2018/19	56.8	49.5	7.3	15%
2019/20	8.8	7.8	1.1	14%
Total	71.3	61.0	10.3	17%

IS payments were 17% higher than expected, with increases seen across all accident periods. This unfavourable experience follows a trend of higher than expected payments observed in recent times, notably 7% and 13% above expectations in the six months to June 2019 and December 2018 respectively.

5.2.2 Active Claims and Exits

Figure 5.1 shows the numbers of (quarterly) active IS claims, by duration, since the RTW Act came into effect.

Figure 5.1 – Numbers of Active IS Claims



Active claim numbers reduced over 2015 as a result of ReturnToWorkSA's claim management strategies. During calendar year 2016, medium-duration actives (1-3 years) were low, as many transitional claims had exited via redemption in the lead-up to the RTW Act. With IS redemptions no longer being used, the numbers of 1-3 year actives increased up to June 2017; active claim numbers then declined notably in December 2017 (and similarly for >3 years claims) as a result of claims exiting due to the 104 week boundary on IS payments.

Since September 2018, active claim numbers have steadily increased, from below 3,500 claims per quarter to almost 4,000 in the most recent quarter. This increase is due to a combination of higher exposure, deteriorating claim frequency and longer claim durations. The fastest growth has been observed in 1-3 year actives, which have grown by more than one-third since September 2018.

In Table 5.3 we compare the numbers of active IS claims at December 2019 with our June 2019 valuation projection. This has been done only for periods where we projected future active claims at the June 2019 valuation (accident quarter March 2017 and later).

Table 5.3 – AvE Active Claims

Accident Quarter	Proj from Jun-19 Val	Actual Actives	Act *less* Proj	Diff as % Proj
Mar-17	12	15	3	23%
Jun-17	24	31	7	31%
Sep-17	62	88	26	42%
Dec-17	181	190	9	5%
Mar-18	212	230	18	8%
Jun-18	282	285	3	1%
Sep-18	270	312	42	15%
Dec-18	330	350	20	6%
Mar-19	380	427	47	12%
Jun-19	489	536	47	10%
Sep-19	657	665	8	1%
Dec-19	212	186	-26	-12%
Total	3,112	3,315	203	7%

Overall, active claim numbers at December 2019 for these periods were 7% above expectations. In particular, the 2018/19 year was around 150 claims (11%) higher than projected. This year makes up just over half, $18.4 million, of the total actuarial strengthening at this valuation.

5.3 Modelling of STC IS Payments

Our modelling approach for IS payments involves:

- **For all IS payments in the first three years after injury (development years 1 to 3) – a PPAC model** which models all IS entitlements at these durations; this includes IS payments to dependants, late IS payments (back-pay), claims with 'late starting incapacity' and IS payments made following surgery where the claimant would not otherwise have been entitled to IS.
- **For all IS payments more than three years after injury (development years 4 and later) – a PPCI model**, which splits out IS payments to dependants from other IS payments (mostly back-pay and IS payments following surgery). This PPCI model uses total claim numbers (not just IS claims) as the base.

This approach is unchanged from our June 2019 valuation.

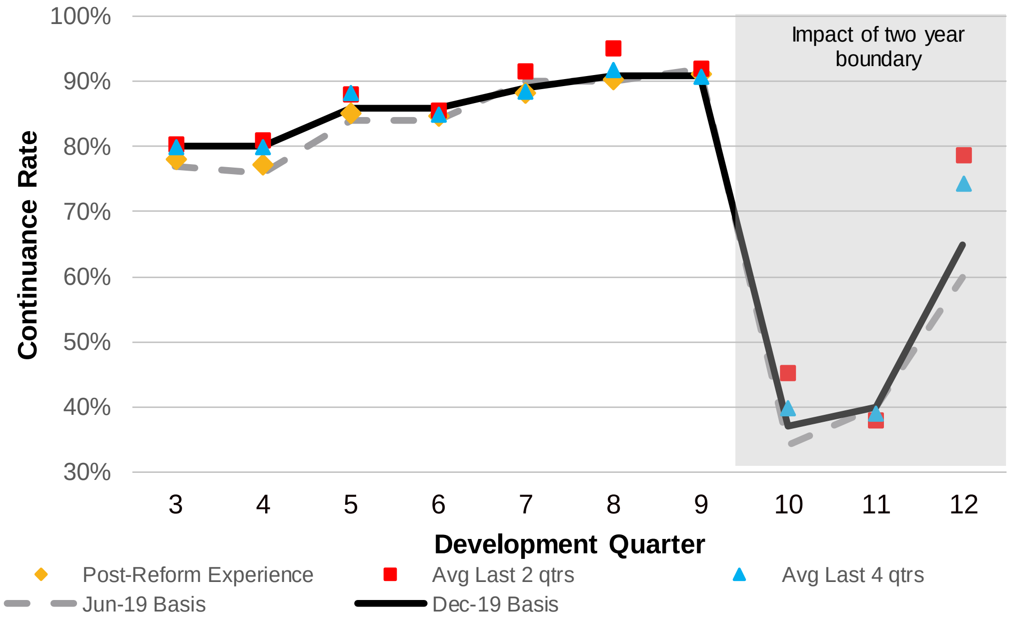
5.4 Valuation Basis

5.4.1 IS Payments in Years 1-3: PPAC Model

Projection of Active Claims

Figure 5.2 below shows the recent continuance experience relating to post-reform claims, and our adopted bases at the previous and current valuations.

Figure 5.2 – Continuance Rates



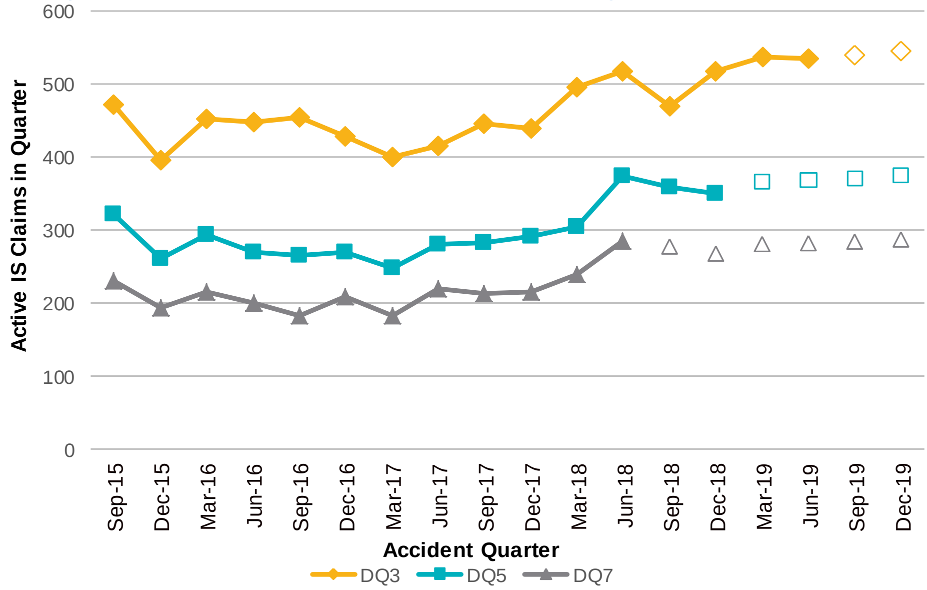
We have adopted higher continuance rates for this valuation, reflecting the deteriorating continuance rate experience in recent times that can be seen from the two and four quarter average continuance rates shown in Figure 5.2. The valuation basis has been set:

- Close to the latest experience out to development quarter 5, where the two and four quarter averages are similar – it is these periods that led to most of the valuation increase for IS at the last valuation, and it seems that the claims experience has currently stabilised at this level
- Slightly below the latest experience (as per the two quarter average) from development quarter seven to nine – at these durations the claims experience has quickly deteriorated over the last six months, and so our response has been tempered until it is clear whether this is a permanent deterioration or else the experience can stabilise more in line with the four period averages.

The key implication of the above continuance rates is that a level of improvement is required from that seen in the last six months in order to avoid further liability strain at future valuations.

Figure 5.3 below shows the outworking of our projection of active claims at development quarters 3, 5 and 7. The solid lines show the actual number of active claims and the dots show our projection.

Figure 5.3 – Income Support Claims Reaching Specified Durations



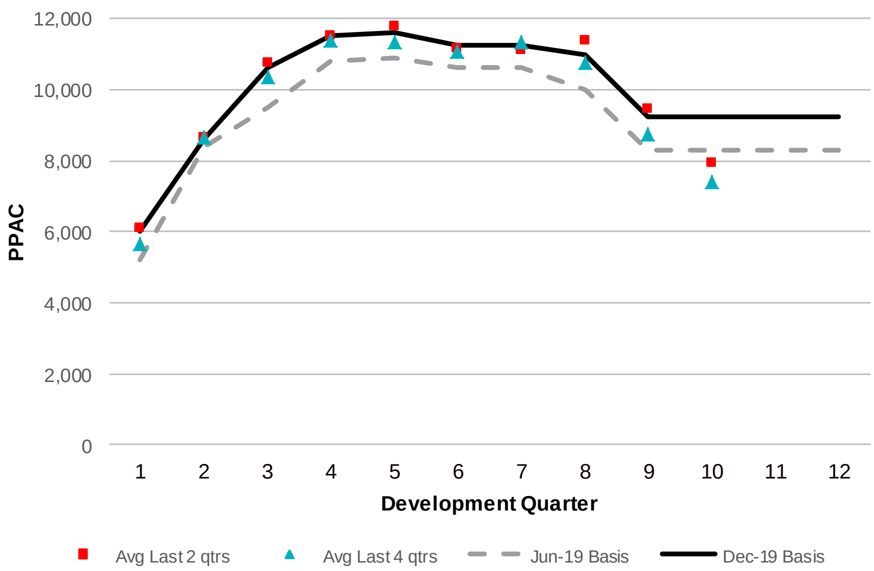
At the previous valuation, we had anticipated more favourable experience for the 2018/19 year, recognising that ReturnToWorkSA and its agents had undertaken additional work to address the causes of claim deterioration, and the early signs were that this was stabilising the claims experience. However, as Figure 5.3 shows, IS claims remained at high levels through development quarters 3 and 5, which is also projected to flow through to higher active claim numbers in development quarter 7.

Our projection implies that the future active claims for the December 2019 accident quarter will be broadly consistent with other recent quarters, despite its active numbers at this very early stage being quite low. Its experience after only one quarter is not considered to be a reliable indicator of future outcomes.

Payments per Active Claim

Figure 5.4 below shows the recent PPAC experience relating to post-reform claims, and our adopted bases at the previous and current valuations.

Figure 5.4 – Payments per Active Claim ($Dec-19)



The most recent PPAC experience is emerging higher than our June 2019 basis, which reflects the increasing duration of claims as well as the growth in higher severity mental injury and musculoskeletal claims relative to other claim types. Separate analysis by ReturnToWorkSA also shows that pre-injury earnings of the claim group have increased by more than normal on recent claims. We have responded by increasing our adopted PPACs as shown. The impact of these changes is an increase in the estimated liability.

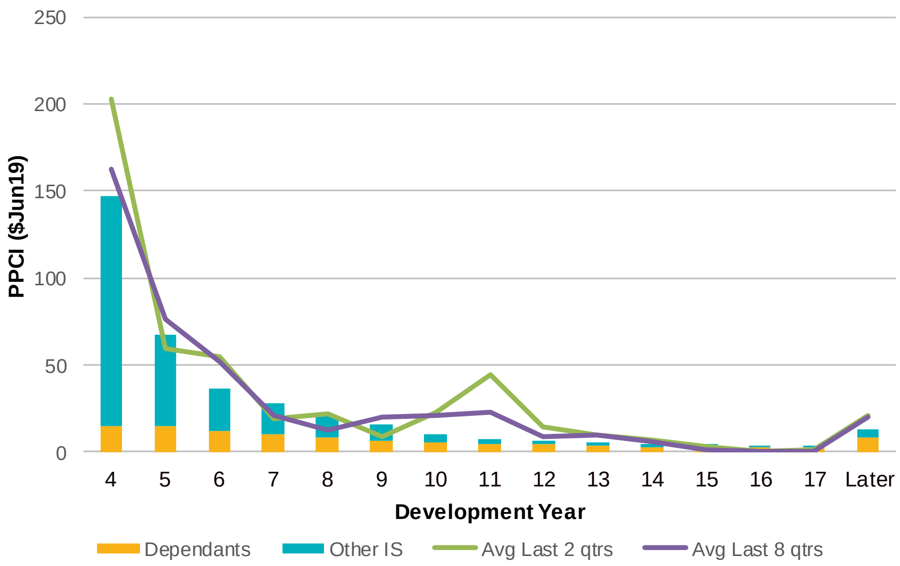
5.4.2 IS Payments after Year 3: PPCI Model

The overall adopted average PPCI size of about $375 per reported claim is made up of two components:

- The allowance for ongoing dependant claim benefits, which remains unchanged after the impact of inflation at about $105 per reported claim
- An allowance for post-surgery IS payments, claims with 'late starting incapacity' and back-pay of about $270 per reported claim, up from $250 last valuation (inflated) and around $200 prior to that. This allowance has increased due to payments continuing to emerge higher than expected; this assumption will continue to be updated as more post-RTW Act experience emerges, given that there are still only six accident quarters which have passed the three-year mark to date.

Figure 5.5 shows the adopted PPCI basis and its components. As this shows, even though our basis has been increased it is still slightly below the most recent actual experience, but is similar to the eight quarter average.

Figure 5.5 – Adopted IS PPCI Basis (Average IS Cost per Reported Claim)



5.5 Valuation Results and Actuarial Release

Table 5.4 sets out the components of the actuarial release for IS payments.

Table 5.4 – Components of Actuarial Release: Income Support

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(10.3)
Difference from projected liability		
IS actives experience	(7.0)	
Continuance rates	(8.2)	
PPACs	(10.1)	
PPCI model	(1.1)	
		(26.4)
Total		(36.7)

The actuarial strengthening of $36.7 million is made up of payments in the six months being $10.3 million higher than expected, and a $26.4 million increase in the projected liability from June 2019, composed of the following changes:

- A $7.0 million increase due to actual active claim numbers to December 2019 being higher than projected ('IS Actives Experience')
- A $8.2 million increase as a result of increases to the continuance rates used to project future IS claim numbers ('Continuance rates');
- A $10.1 million increase due to the slippage in return to work experience being reflected in the adopted average payments; and;
- A $1.1 million net increase due to higher allowances for post-surgery IS payments, claims with 'late starting incapacity' and back-payments.

Table 5.5 summarises these movements by accident period.

Table 5.5 – Actuarial Release for Income Support

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation	Dec 19 Estimate on Jun 19 Eco Assumps	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	2.0	2.0	(0.0)	0.0	(0.0)	0%
2005/06 - 2014/15	11.5	11.4	(0.1)	0.5	(0.5)	-4%
2015/16 - 2016/17	7.6	8.0	0.4	1.3	(1.7)	-23%
2017/18 - 2018/19	68.6	83.5	14.8	7.3	(22.2)	-32%
2019/20	53.8	65.0	11.2	1.1	(12.3)	-23%
Total	143.4	169.8	26.4	10.3	(36.7)	-26%

6 Lump Sums – Short Term Claims

This section describes our valuation of lump sum payments for Short Term claims, including payments for claims which were not identified as a Serious Injury claim prior to the payment of the lump sum. A lump sum is payable to a worker who suffers a compensable disability that results in at least 5% whole person impairment (WPI). Separate Lump Sums compensate claimants for non-economic loss and future economic loss, although compensation for future economic loss is only available to claims with injuries from 1 July 2015.

Introduction

We value lump sums in five segments:

- "Death" and funeral claims
- "Hearing Loss" claims
- "First Paid" lump sums – where a claimant receives their first lump sum payment for the relevant claim (excluding Death and Hearing Loss claims); this is for non-economic loss only
- "Economic Loss" lump sums – Short Term claims may receive an additional payment for loss of future earning capacity. This is a new benefit under the RTW Act and is available to new injuries from 1 July 2015
- "Top Up" lump sums – where a claimant receives an additional payment in a half-year after they received their first lump sum payment (excluding Death and Hearing Loss claims). These are now only allowable for claimants with injury dates prior to 1 July 2015 who lodged an application prior to 30 June 2016.

Appendix A specifies the complete definitions for the lump sum valuation.

6.1 Summary of Results

Table 6.1 summarises the movements in our liability estimates for lump sum payments since the June 2019 valuation.

Table 6.1 – Valuation Results: Lump Sums

Jun19 Valuation	$m	$m	$m
Estimated Liab at Jun-19	286.9		
Projected Liab at Dec-19	292.2		
Dec-19 Valuation		AvE pmts	Release
Impact of experience/OSC - Movement in liab	2.8	3.3	(6.1)
Estimated Liab at Dec-19 (Jun-19 eco assumptions)	**295.0**		
Impact of change in eco assumptions	0.2		
Estimated Liab at Dec-19 (Dec-19 eco assumptions)	**295.2**		

The December 2019 liability shows an actuarial strengthening of $6.1 million since June 2019, reflecting an increase of $2.8 million in the liability, and $3.3 million of higher claims payments. The remainder of this section deals with this impact while the impact of the change in economic assumptions is discussed in Section 11.3.2.

6.2 Payment Experience

Table 6.2 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 6.2 – Actual vs Expected Payments: Lump Sums

Accident Period	Payments in Six Months to Dec 19 Actual	Expected	Act - Exp	% Difference
	$m	$m	$m	
To 30 Jun 05	1.2	0.5	0.7	144%
2005/06 - 2014/15	7.4	5.8	1.6	27%
2015/16 - 2016/17	20.1	21.6	(1.5)	-7%
2017/18 - 2018/19	13.4	10.8	2.6	24%
2019/20[1]	0.7	0.8	(0.1)	-13%
Total	42.8	39.5	3.3	8%

[1] Accidents to Dec19

Payments were 8% higher than expected in the six months to 31 December 2019, with higher than expected payments for most years. The recent payment experience reflects a material increase in the number of hearing loss lump sums along with a speeding up of payments for the three latest accident periods.

6.3 Valuation Basis

Valuation Basis for First Paid Lump Sums

Our valuation basis adopts a combination of the chain ladder approach for more mature accident periods and a frequency based approach for more recent accident periods where there is less experience and there have been changes in the pattern of payments. Table 6.3 below compares the actual and expected number of First Paid lump sums paid in the six months to December 2019.

Table 6.3 – Actual vs Expected Payments: First Paid Lump Sums

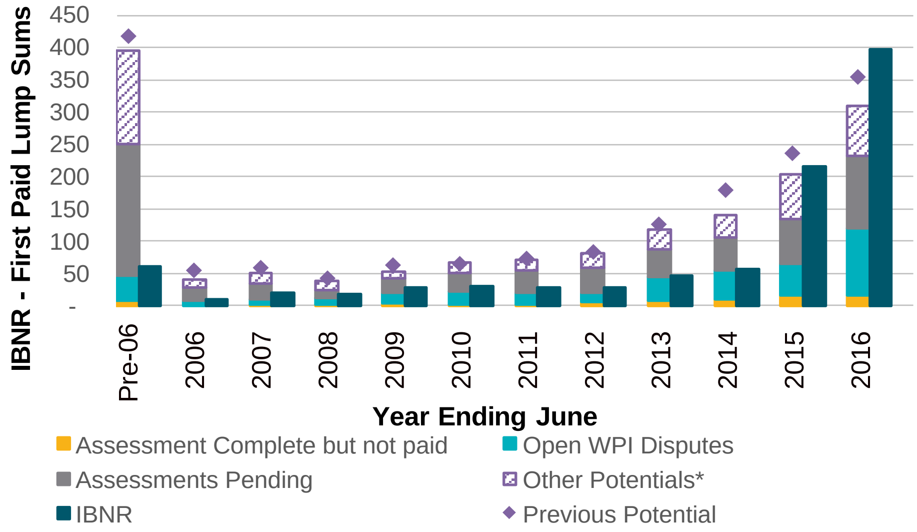
Accident Period	Number of Payments in Six Months to Dec 19 Actual	Expected	Act - Exp	% Difference
To 30 Jun 05	34	3	31	1212%
2005/06 - 2014/15	165	168	-3	-2%
2015/16 - 2016/17	276	378	-102	-27%
2017/18 - 2018/19	205	103	102	98%
2019/20[1]	1	0	1	n/a
Total	681	652	29	4%

[1] Accidents to Dec19

The number of First Paid lump sums in the last six months was 4% higher than expected, a contrast to the experience observed since the RTW Act commenced where payments have been significantly slower than expected. This was mostly due to higher than expected payments for transitional claims as a result of the claims projects currently underway. Experience for RTW Act periods are variable, with slower than expected payments for 2015/16 to 2016/17 offset by faster than expected payments for the more recent accident periods.

To test the reasonableness of our basis for older accident years, Figure 6.1 below compares the most likely sources of future lump sum payments (left-side bar) with the IBNR allowance for First Paid lump sums (right-side bar) for each accident year up to 2016.

Figure 6.1 – Comparison of Identified Potential Future Lump Sum Claims and Model IBNR Allowance (for accident periods up to June 2016)



*Includes Not at MMI, Not Stable and Agent Review (not appropriate to proceed)

Figure 6.1 shows that:

- The number of identified potential future lump sum claims has reduced marginally for most recent accident years due to high settlement activity from ReturnToWorkSA's initiative to finalise open transitional claims as discussed in Section 3.3.1.
- Pre-2006 accident periods have a high number of WPI assessments in progress. We understand this is linked to activity by ReturnToWorkSA to undertake WPI assessments for all 'prior claims' on workers currently having a WPI assessment. Most of these assessments are expected to end up with a WPI lower than 5% and therefore not be entitled to a lump sum payment. Our adopted IBNR allowance is unchanged for these accident periods and allows for around 50% of open disputes and 10% of pending assessments to be successful. As shown in Table 6.3, a lot of new claims were paid in the last six months as a result of the recent high level of activity (although we note that we hadn't changed the payment pattern to recognise this speeding up of old accident period lump sums).
- For accident years 2006 to 2014 which are initially based on the chain ladder approach, there are a large number of claims with pending WPI assessments, open disputes or potential future assessments. Our previous valuation included an additional IBNR allowance in addition to the chain ladder projections to reflect the number of pending assessments and open disputes, and we have updated this allowance to reflect the number of lump sums paid during the last six months. This allows for around 40% of open disputes and 40% of pending and future assessments to receive a lump sum.
- For the 2015 and later accident years, our IBNR allowance is higher than the currently identified potential sources of lump sum payments. The remaining "gap" in our basis allows for lump sum payments from claims which have not yet been identified as having a potential lump sum entitlement. Given the increasing duration from injury, it is getting harder to see where these claims could emerge from, and as such we have reduced our projection of ultimates by 40 claims for the 2015 and 2016 years, and 10 claims for 2017.

Beyond 2017, we have increased our projection of ultimates by 20 claims per year to realign our basis with the higher number of overall claims for these accident periods, but to be clear our lump sum basis does *not* factor additional lump sum claims to emerge due to the longer durations of Income Support claims in the recent experience. We will continue to monitor the lump sum experience over the coming valuations and adjust the basis as necessary.

Figure 6.2 shows the projected ultimate numbers of First Paid lump sums, split into paid and IBNR claims.

Figure 6.2 – Projected Ultimate Numbers of First Paid Lump Sums

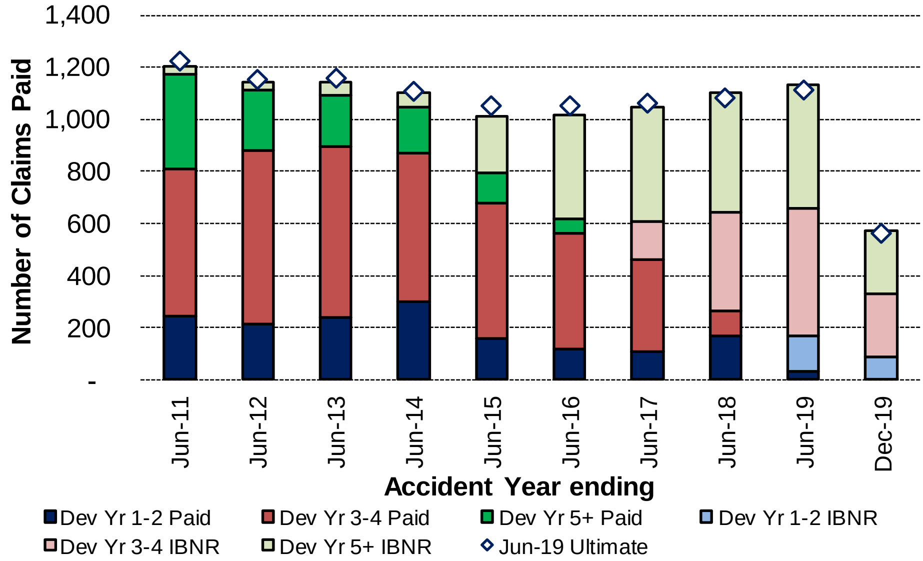
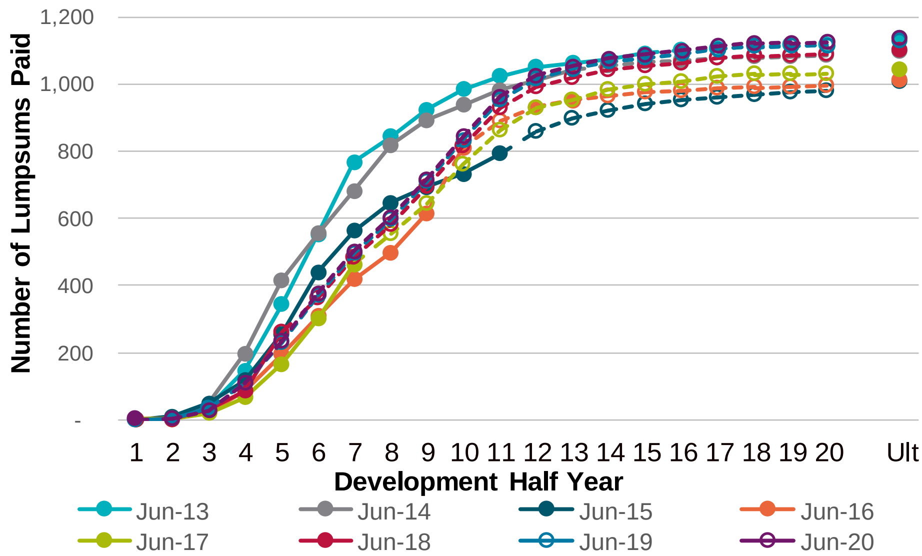


Figure 6.3 shows the cumulative number of First Paid lump sums by development year for accident years 2011 to 2019. The dotted line represents the projected development based on our selected payment pattern.

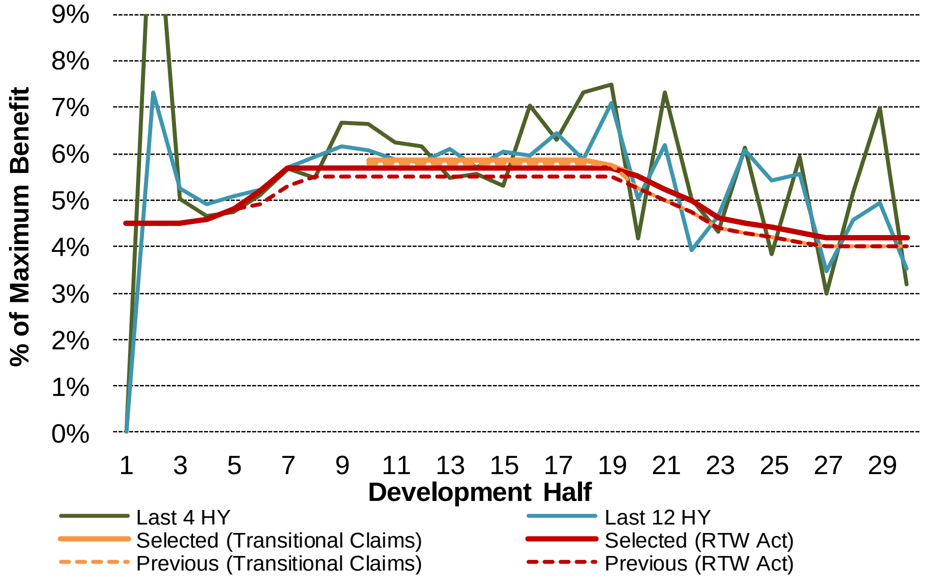
Figure 6.3 – First Paid Lump Sums Development



As Figure 6.3 shows, lump sum payments for all RTW Act accident years are currently sitting below pre-reform years. For 2018 and later years, the emerging experience suggests a faster payment pattern compared to 2016 and 2017. Our selected payment pattern up to development half-year 10 reflects this experience, followed by a 'kick up' in the tail to reach the projected ultimate levels.

Figure 6.4 shows the average size of First Paid claims as a percentage of the maximum benefit available, by duration from injury.

Figure 6.4 – First Paid Lump Sums by Development Half-Year (as a percentage of the maximum benefit)



We have increased our adopted size selections for both RTW Act and Transitional Claims at this valuation in response to the emerging experience. At an overall level, the average First Paid lump sum is expected to be 5.4% of the prescribed maximum benefit, or around $26,500.

Valuation Basis for Top Up Lump Sums

The number of Top Up lump sums is projected as a percentage of the ultimate number of First Paid lump sums. Top Up lump sum payments were initially removed under the RTW Act changes, but following a Regulation change in December 2015, they were added back in a restricted form, with a requirement that any applications for a Top Up lump sum had to be made by 30 June 2016 (although the assessments can still take place at a later date).

The number of Top Up lump sums payments in the six months to 31 December 2019 were in line with expectations. Average payments sizes were around 20% higher than expected, but this is on very few payments. Our Top Up lump sums basis is unchanged and allows for 96 future payments, consistent with the number of pending and approved but unpaid applications. While there is uncertainty around the success rate of the current applications and the lump sum payments, the value is not large.

Details are included in Appendix G.

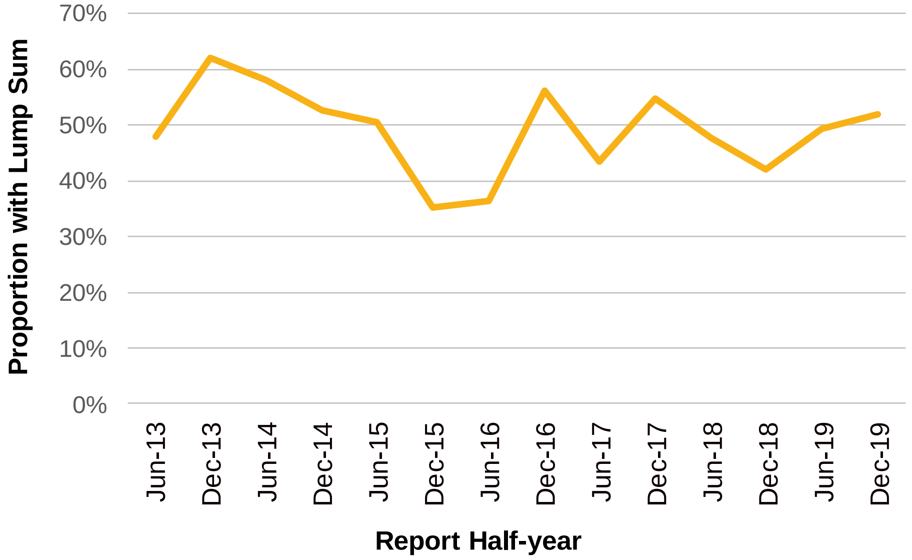
Valuation Basis for Hearing Loss Lump Sums

When estimating the number of future Hearing Loss lump sums, there is no differentiation between First Paid and Top Ups. In undertaking the Hearing Loss lump sum projection we have been conscious of the recent increase in the number of reported hearing loss claims.

Hearing Loss lump sum payments over the last six months were around 65% higher than expected, emerging higher across all accident periods. This is the third consecutive valuation where we have observed significantly higher than expected payments. As discussed in Section 3.3.4, this is due to increased activity by new and existing providers targeting hearing loss claims, which is leading to more claims.

As Figure 6.5 below shows, the number of Hearing Loss lump sum payments as a proportion of overall hearing loss claim reports, as a test of whether the rapid growth in new claims has led to any apparent change in the utilisation of lump sums. Note the lump sum payments have been lagged by half a year to account for the delay between claim report and payment.

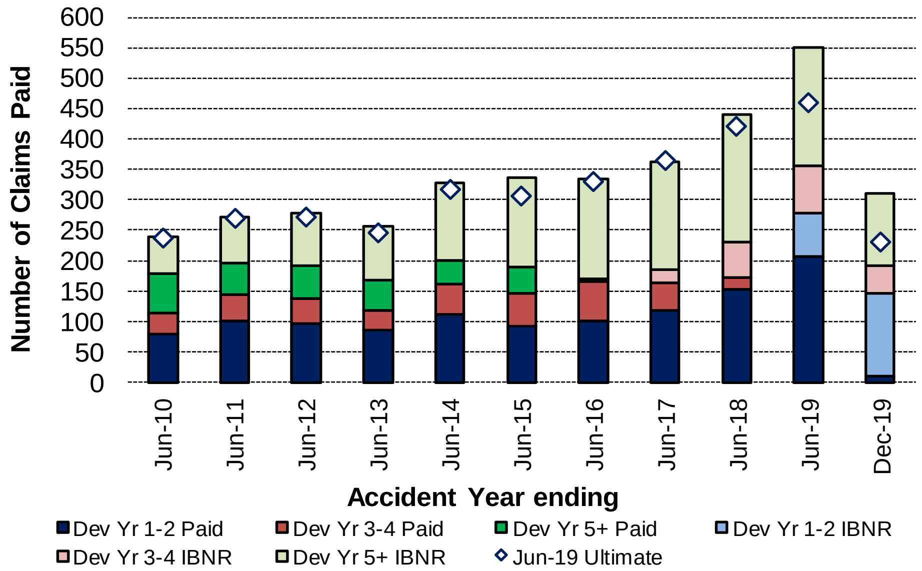
Figure 6.5 – Proportion of Hearing Loss Claims Getting a Lump Sum



As this shows, the proportion of Hearing Loss claims receiving a lump sum has been relatively stable at around 50%, and our projection has been set to be consistent with this.

Figure 6.6 shows the projected numbers of Hearing Loss lump sums by accident year. The tail of Hearing Loss IBNR claims is considerably longer than for First Paid lump sums, with claims still occurring many years after the injury (as is common for Hearing Loss claims).

Figure 6.6 – Projected Ultimate Numbers of Hearing Loss Lump Sums

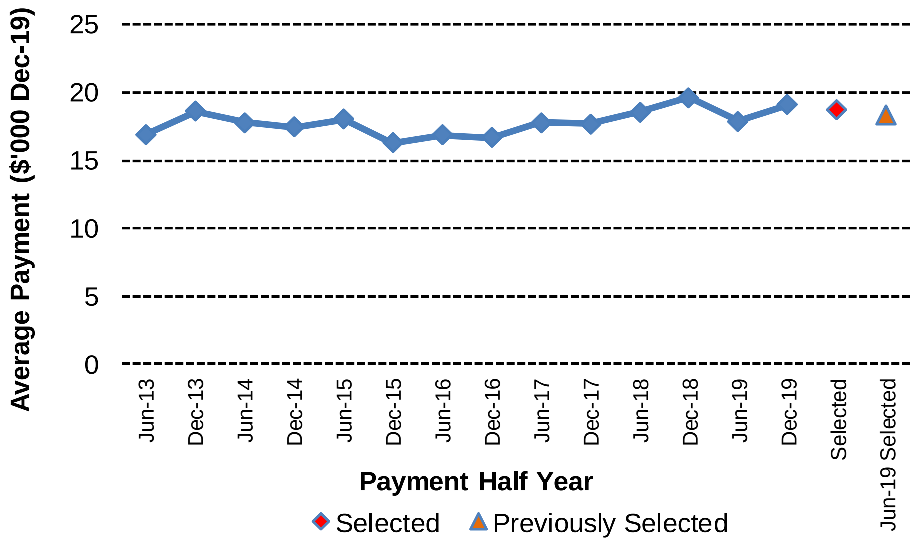


We adopt a frequency approach relative to hearing loss claims for accident periods after December 2016 to allow for changes in payment speeds, given the somewhat “lumpy” nature of Hearing Loss lump sum payments. For the 2018 calendar year, we have increased our selection of ultimates by 40 claims to be consistent with the higher experience observed over the past 18 months. For periods after 2018, where there is a significant increase in the number of claims reported with a hearing loss injury, we have increased our selection of ultimate Hearing Loss lump sums by around 150 claims per annum (on a full new accident year). Our selected increase is centred around the first two development years as shown by the total height of the blue bars in Figure 6.6. As discussed in Section 4.1.1, we have interpreted that some of the growth is a bring forward, and if this is not the case then hearing loss lump sums will likely need to be increased further.

Periods prior to June 2017 adopt a chain ladder approach. Our selected development factors are unchanged at this valuation.

Figure 6.7 shows the overall average benefit paid for a Hearing Loss lump sum claim. The selected average Hearing Loss benefit at this valuation is around $19,000 per claim which is an increase of around $500 from the previous valuation. The increase reflects the higher average sizes emerging in the experience over the last two years.

Figure 6.7 – Average Lump Sum Hearing Loss Payment ($Dec-19)



Valuation Basis for Death Lump Sums

Experience for Death (and funeral) lump sums were favourable over the last six months with the number and amount of payments being 57% and 74% lower than expected respectively. Death lump sums experience tends to be volatile, and at this valuation we allowed the favourable numbers experience to flow through to the basis.

Figure 6.8 shows the projected numbers of Death lump sums by accident year.

Figure 6.8 – Projected Ultimate Numbers of Death Lump Sums

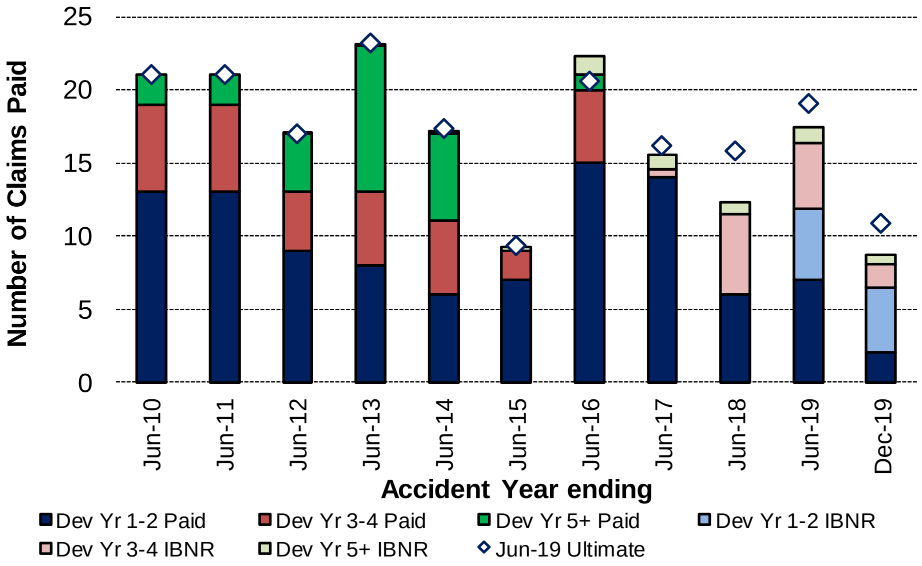
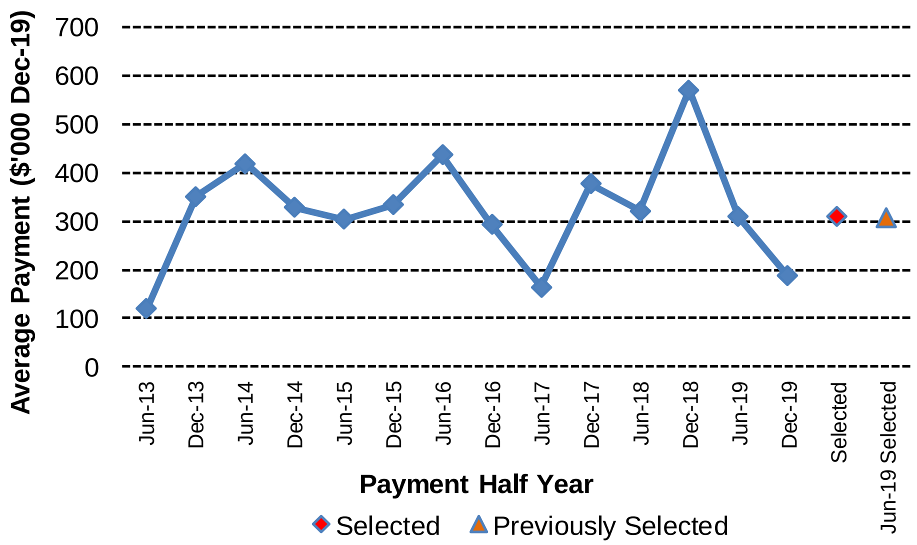


Figure 6.9 shows the average benefit paid to a Death lump sum claim, by payment half year.

Figure 6.9 – Average Lump Sum Death Payment ($Dec-19)



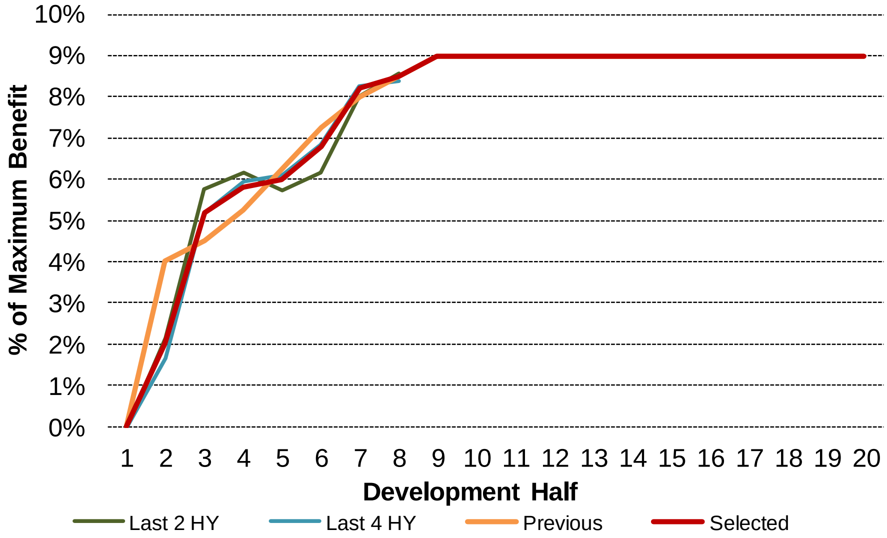
Due to the volatility of the experience, we have not responded to the most recent experience and our adopted size is unchanged after adjusting for (CPI) inflation.

Valuation Basis for Economic Loss Lump Sums

Economic Loss lump sums are paid to a worker for loss of future earning capacity. This benefit is only available under the RTW Act and is available to injuries from 1 July 2015. As expected, payments have emerged in line with First Paid lump sums. We have continued to align the ultimate number of Economic Loss lump sum payments with First Paid lump sums.

Figure 6.10 shows the average size of Economic Loss lump sum payments as a percentage of the maximum benefit available. We have reshaped our size selection for development halves 1 to 7 to be more consistent with the emerging experience. The overall impact is broadly neutral.

Figure 6.10 – Economic Loss Lump Sum Size by Development Half-Year (as a percentage of maximum benefit)



6.4 Valuation Results and Actuarial Release

Table 6.4 sets out the actuarial release resulting from our valuation of lump sum payments. The first column represents our projection from the June 2019 valuation.

Table 6.4 – Actuarial Release for Lump Sums

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	4.5	4.6	0.0	0.7	(0.8)	-17%
2005/06 - 2014/15	24.1	24.0	(0.1)	1.6	(1.5)	-6%
2015/16 - 2016/17	77.3	78.2	0.9	(1.5)	0.6	1%
2017/18 - 2018/19	143.7	144.0	0.3	2.6	(2.9)	-2%
2019/20[1]	42.6	44.2	1.6	(0.1)	(1.5)	-4%
Total	292.2	295.0	2.8	3.3	(6.1)	-2%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $2.8 million increase in projected liability combined with payments being $3.3 million more than expected in the six months, results in an actuarial strengthening of $6.1 million.

Table 6.5 breaks down the actuarial strengthening by source.

Table 6.5 – Components of Actuarial Release: Lump Sums

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(3.3)
Changes to Valuation Basis		
First paid and eco loss numbers	3.2	
First paid size and payment pattern	(2.9)	
Hearing loss numbers	(3.2)	
Hearing loss size	(0.3)	
Eco loss size	0.3	
Subtotal		(2.8)
Total		(6.1)

Higher than expected payments in the six months to December 2019 contribute an increase of $3.3 million. This is partly offset by changes to the First Paid and Economic Loss lump sum numbers resulting in a decrease of $3.2 million, which is a result of faster payments being released in the outstanding claims liability and offsetting movements to the projected ultimate claim numbers for RTW Act periods. Higher sizes for First Paid lump sums, partly offset by a faster payment pattern contribute to a $2.9 million increase. In total, Hearing Loss claim numbers and claim size increases add a further $3.5 million, while a reshaping of Economic Loss sizes reduce the liability by $0.3 million.

7 Treatment and Related Costs – Short Term Claims

Workers who suffer a compensable injury are entitled to compensation for a range of medical and other treatment related costs. For the valuation we split these entitlements into the following groups: Medical, Physical Therapy, Hospital, Rehabilitation (Vocational Rehabilitation), Travel and 'Other'. Medical payments are the most significant of these entitlements.

7.1 Summary of Results

Table 7.1 summarises the movements in our liability estimates for treatment and related cost payments since the June 2019 valuation.

Table 7.1 – Valuation Results: Treatment Costs

	Medical	Hospital	Travel	Rehab	Physical Therapy	Other	Total Treatment
Jun19 Valuation	$m	$m	$m	$m	$m	$m	$m
Estimated Liab at Jun-19	123.1	20.3	5.2	13.6	8.1	7.8	178.1
Projected Liab at Dec-19	124.2	21.0	5.4	14.0	8.2	8.0	180.7
Dec-19 Valuation							
Impact of experience/OSC - Movement in liab	9.7	(0.8)	0.3	1.9	0.1	(0.0)	11.3
Estimated Liab at Dec-19 (Jun-19 eco assumptions)	**133.9**	**20.3**	**5.7**	**15.9**	**8.3**	**7.9**	**192.0**
Impact of change in eco assumptions	0.3	0.0	0.0	0.0	0.0	0.0	0.3
Estimated Liab at Dec-19 (Dec-19 eco assumptions)	**134.2**	**20.3**	**5.7**	**15.9**	**8.4**	**7.9**	**192.3**
AvE Payments - six months to Dec-19	4.6	(0.2)	0.4	1.3	0.4	0.2	6.7
Actuarial Release at Dec-19	(14.4)	1.0	(0.7)	(3.2)	(0.6)	(0.1)	(17.9)

The main movements from our June 2019 projection of the December 2019 liability are:

- An increase of $11.3 million in the liability, reflecting the recent experience and valuation response. This produces an actuarial strengthening of $17.9 million when combined with actual payments in the period being $6.7 million more than expected.
- Movements in economic assumptions, increasing the treatment related liabilities by $0.3 million.

The remainder of this section deals with the payment experience and valuation basis. The impact of the change in economic assumptions is discussed in Section 11.3.2.

7.2 Valuation Approach

Under the RTW Act most treatment and related costs cease 12 months after Income Support ends. The exceptions to this are payments for medical aids and appliances, payments related to approved surgeries, and medico-legal costs (for example related to medical assessments for WPI). Our modelling approach captures these features using:

- Active claim model (PPAC) – this is used for the valuation of Medical liabilities (excluding Aids and Appliances) for claims that are also receiving Income Support (IS) payments; for up to three years from the date of injury.
- Long term model (PPCI) – this is a quarterly model used for the valuation of all other treatment related liabilities, namely:
  - For Medical payments (excluding Aids and Appliances): to claims that are not receiving IS payments.

- For claimants receiving Medical payments (excluding Aids and Appliances) alongside IS payments more than three years from the date of injury (generally due to long delay to first IS incapacity).
- For other treatment related costs: this is used to value the total future cost of that entitlement, without differentiating between claims receiving Income Support.

- In most cases, we have shown two sets of valuation assumptions, namely:
  - "RTW Act claims" – claims occurring after the RTW Act provisions commenced on 1 July 2015, that is where the new rules apply from day one of the claim: for these claims, it will typically take around four to five years before payments reduce to zero, due to a combination of (1) claimants who do not commence their incapacity until sometime after their injury, and (2) payment delays.
  - "Transitional claims" – those that occurred prior to 30 June 2015: for these claims, the duration boundaries commenced on 1 July 2015 and so payments will generally cease soon after 30 June 2018. The "Transitional claims" selections generally only apply for a small number of projection quarters before reverting to the "RTW Act claims" selections; the exception is certain benefit types where there is still a high level of payments related to dispute activity, in which cases we have extended the period where transitional selections are applied.

Detailed descriptions of the projection models and details of all projection assumptions are included in Appendix A and H.

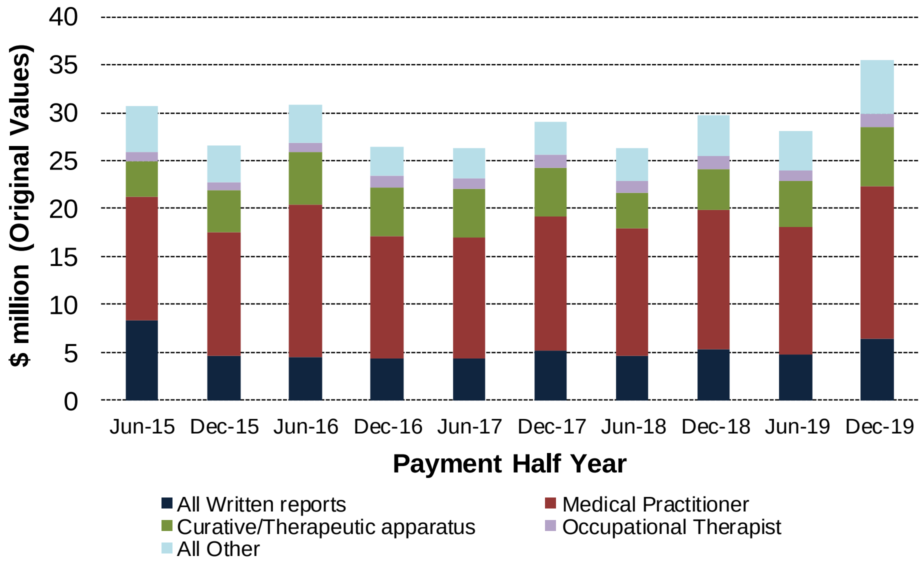
7.3 Medical

Medical payments includes payments for treating doctors, written medical reports, therapeutic devices, pharmaceuticals, psychologists, dentists and other allied health (except for physiotherapy costs which are separately modelled in Section 7.7), including medico-legal costs.

Payments vs Expectations

Figure 7.1 below shows medical payments by six month period, split by the type of service.

Figure 7.1 – Medical Half-Yearly Payments



Medical payment levels were relatively stable since June 2015, with the exception of the latest half-year where payments have reached more than $35 million due to higher payments across all types of services.

Table 7.2 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 7.2 – Actual vs Expected Payments: Medical

Accident	Payments in Six Months to Dec 19			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	1.6	1.2	0.4	34%
2005/06 - 2014/15	3.4	2.6	0.8	30%
2015/16 - 2016/17	3.7	2.6	1.1	43%
2017/18 - 2018/19	20.7	19.1	1.6	8%
2019/20[1]	6.1	5.4	0.7	13%
Total	35.5	30.9	4.6	15%

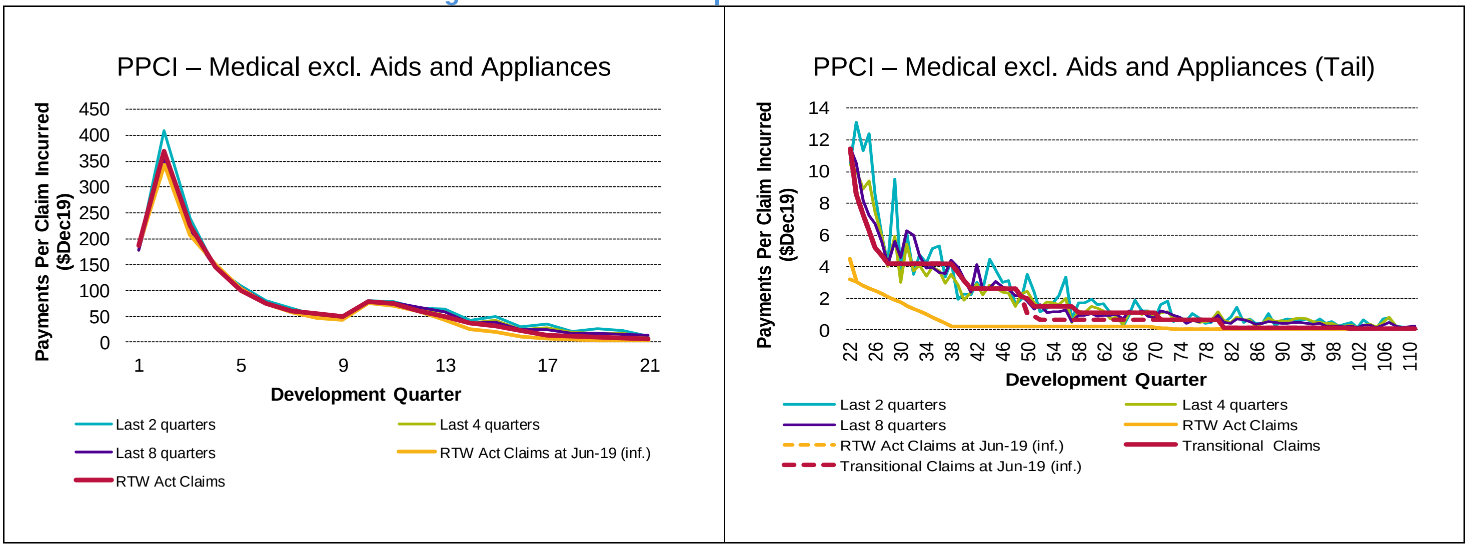
[1] Accidents to Dec19

Overall, payments were 15% higher than expected in the six months to December 2019. In dollar terms, this was driven predominantly by post-reform accident periods, although payments were also proportionately higher across old accident periods.

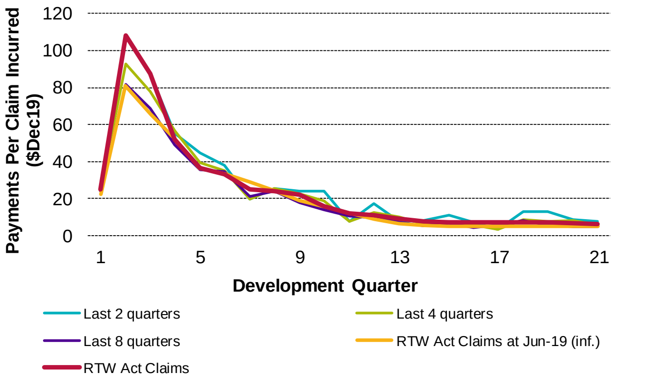
Valuation Basis

Figure 7.2 below shows the recent experience and selected basis for medical payments.

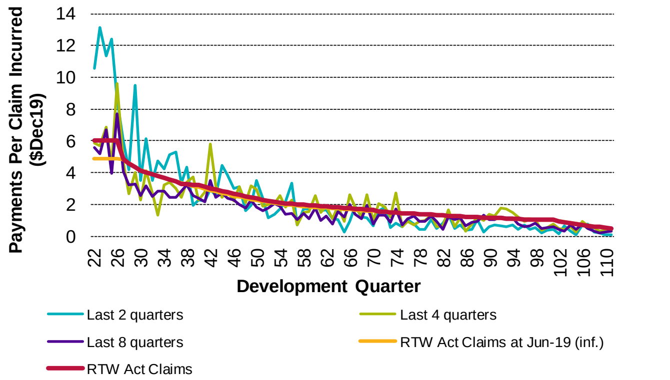
Figure 7.2 – Medical Experience and Selections



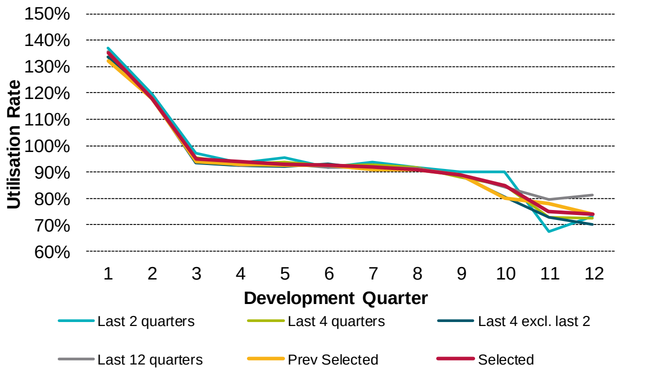
PPCI – Medical Aids and Appliances



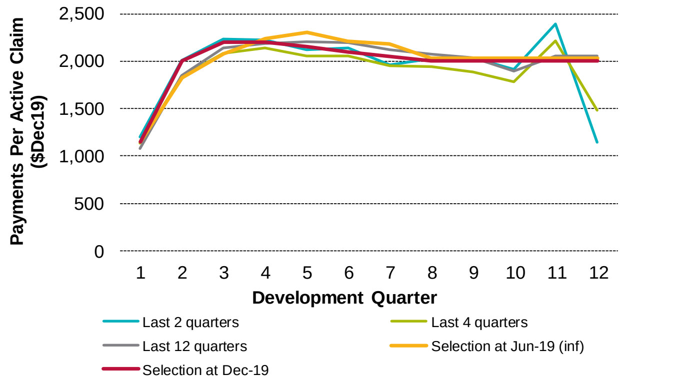
PPCI – Medical Aids and Appliances (Tail)



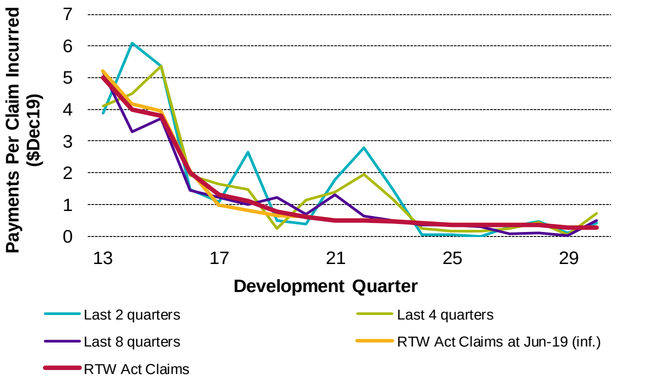
PPAC – Utilisation Rate



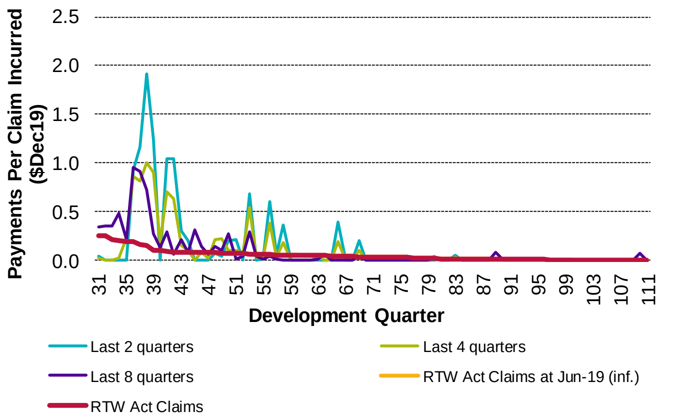
PPAC – Payments Per Active Claim



PPCI – Late Medical Payments with IS



PPCI – Late Medical Payments with IS (Tail)



Our comments on the experience and selected assumptions are:

- PPCI (Medical, excluding aids and appliances):
  - We increased our basis for RTW Act accidents for the first five development years in response to the emerging experience. We have not fully reflected the latest experience as a key driver of the higher payments is medico-legal costs which we expect to be temporarily inflated due to the recent high dispute activity.

- Our valuation basis for transitional claims includes additional payments over the next 12 months and reflects the high levels of written report activity currently. We have increased the tail allowance for transitional claims at the current valuation in response to the experience observed over the past year.

- PPCI (Medical aids and appliances)
  - We adopt the same PPCI pattern for transitional claims and RTW Act claims.
  - There has been a significant increase in the level of payments for development quarters one to three which we have responded to in our valuation basis. We have also increased our selections for development quarters 12 to 26 in line with the emerging experience over the past year. We anticipate part of the higher payments observed relate to increased activity around hearing loss claims resulting in more hearing aid costs.

- PPAC:
  - Medical payments have increased marginally more than the already increasing IS payments, with utilisation levels increasing over the last six months for claims that are receiving an IS payment. We have increased our selected basis for development quarters one to seven and reshaped the pattern from development quarter ten onwards.
  - PPACs increased for early durations up to development quarter four and reduced thereafter over the last six months. We have responded to this experience and reshaped our PPAC selections consistent with the recent experience.

- PPCI (late medical payments for claimants also receiving IS)
  - The dollar value for these medical payments are small. Our PPCI selections have been reshaped at this valuation and are consistent with the long-term experience observed over the last eight quarters.

Valuation Results and Actuarial Release

Table 7.3 sets out the actuarial release resulting from our valuation of medical payments. The first column represents our projection from the June 2019 valuation.

Table 7.3 – Actuarial Release for Medical

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	14.9	14.9	(0.0)	0.4	(0.4)	-3%
2005/06 - 2014/15	30.6	31.1	0.5	0.8	(1.3)	-4%
2015/16 - 2016/17	11.3	13.1	1.8	1.1	(2.9)	-26%
2017/18 - 2018/19	41.4	46.1	4.7	1.6	(6.3)	-15%
2019/20[1]	26.0	28.8	2.7	0.7	(3.4)	-13%
Total	124.2	133.9	9.7	4.6	(14.4)	-12%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $9.7 million increase in the projected liability combined with actual payments being $4.6 million higher than expected results in an actuarial strengthening of $14.4 million.

Table 7.4 breaks down the actuarial strengthening by source.

Table 7.4 – Components of Actuarial Release: Medical

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(4.6)
Changes to Valuation Basis		
Claim numbers	1.0	
IS active projection changes	(3.1)	
PPACs and utilisation	0.3	
PPCIs	(8.0)	
Subtotal		(9.7)
Total		(14.4)

The main drivers of change are:

- Changes to PPCI assumptions (higher costs per claim) for other medical payments have resulted in a $8.0 million increase in the liability.
- Higher Income Support actives increase the liability by $3.1 million.
- Lower ultimate claim numbers result in an actuarial release of $1.0 million.
- Changes to PPAC and utilisation decrease the liability by $0.3 million.

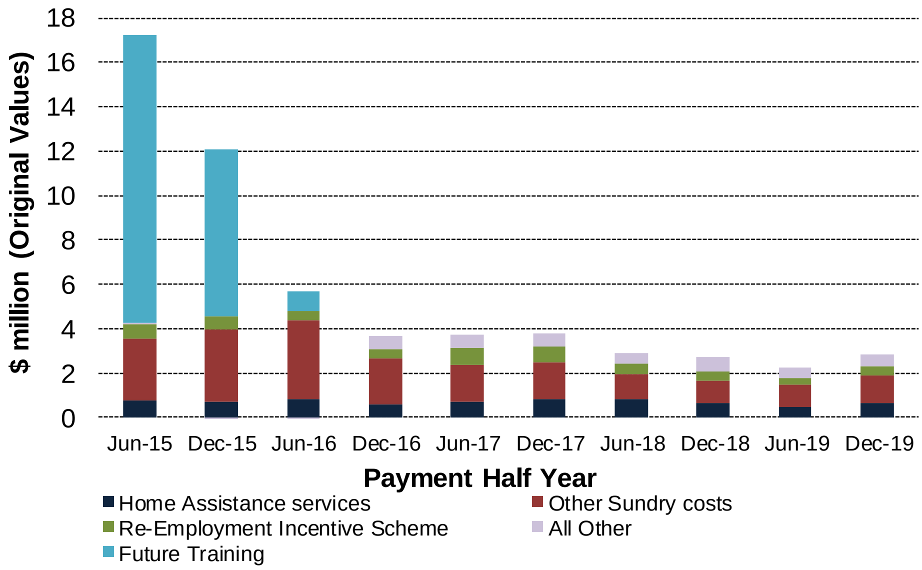
7.4 Other

The Other payment type includes payments on home assistance and modifications, Re-Employment Incentive Scheme (RISE), future retraining costs and other sundry costs.

Payments vs Expectations

Figure 7.3 below shows ‘other’ payments by six month period.

Figure 7.3 – Other Half-Yearly Payments



After a period of high payments peaking with the June 2015 half-year, Other payments have reduced in the last four years following reductions in Other Sundry Costs and re-employment incentives. ‘Future training and education' benefits are no longer paid to workers. Over the last six months, payments have increased slightly due to higher Other Sundry Costs.

Table 7.5 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 7.5 – Actual vs Expected Payments: Other

Accident	Payments in Six Months to Dec 19			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.1	(0.0)	-51%
2015/16 - 2016/17	0.3	0.3	0.0	6%
2017/18 - 2018/19	2.4	2.2	0.2	9%
2019/20[1]	0.1	0.1	(0.0)	-18%
Total	2.8	2.7	0.2	6%

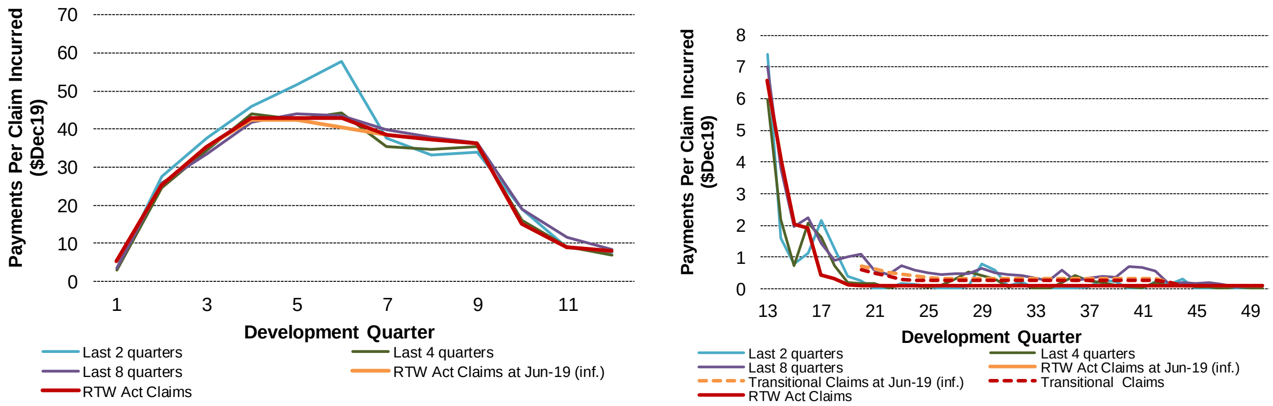
[1] Accidents to Dec19

Overall, payments were 6% higher than expectations. This is largely due to the RTW Act accident periods with some minor differences in older accident periods.

Valuation Basis

Figure 7.4 below shows the recent experience and selected basis for 'other' payments.

Figure 7.4 – PPCI Experience and Selections: Other



We have increased our PPCI selections for development quarters four to six in response to the recent experience. It remains to be seen if the recent spike in payments observed over the last two quarters is a permanent feature of the experience and therefore, we have not fully responded to this experience. For transitional claims we reduced the PPCI selections between development quarters 20 and 42 consistent with the emerging experience. Our basis includes additional payments over the next 12 months for surgery and dispute related costs.

Valuation Results and Actuarial Release

Table 7.6 sets out the actuarial release resulting from our valuation of 'other' payments. The first column represents our projection from the June 2019 valuation.

Table 7.6 – Actuarial Release for Other

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.00	0.0	(0.0)	
2005/06 - 2014/15	0.4	0.3	(0.02)	(0.0)	0.1	16%
2015/16 - 2016/17	0.3	0.3	(0.00)	0.0	(0.0)	-5%
2017/18 - 2018/19	4.6	4.6	(0.02)	0.2	(0.2)	-4%
2019/20[1]	2.7	2.7	(0.01)	(0.0)	0.0	1%
Total	8.0	7.9	(0.05)	0.2	(0.1)	-1%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $0.05 million decrease in the projected liability combined with actual payments being $0.16 million higher than expected results in a minor actuarial strengthening of $0.1 million.

Table 7.7 breaks down the actuarial release by source.

Table 7.7 – Components of Actuarial Release: Other

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(0.2)
Changes to Valuation Basis		
Ultimate claims	0.1	
PPCIs	(0.0)	
Subtotal		0.0
Total		(0.1)

Changes to our PPCI basis are neutral overall, while lower ultimate claim numbers contribute $0.1 million to the actuarial release.

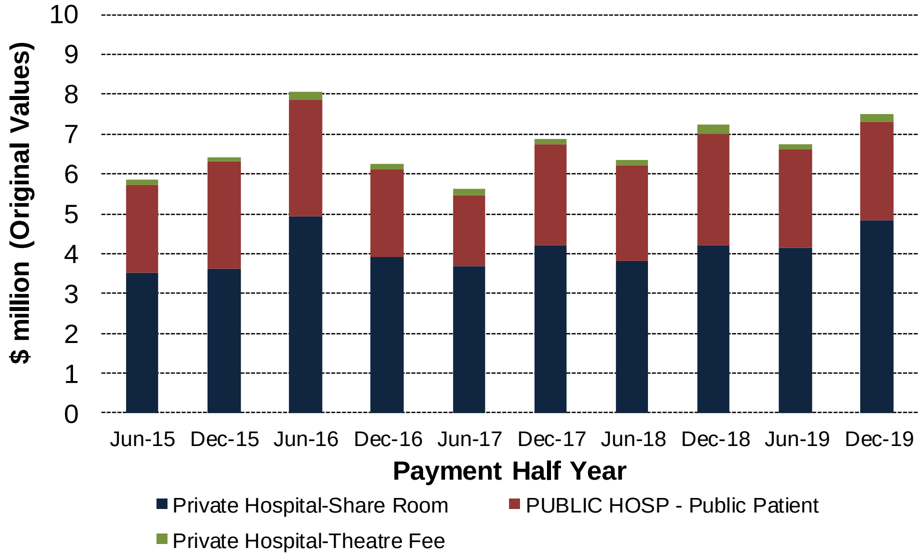
7.5 Hospital

Hospital payments include payments made to public and private hospitals.

Payments vs Expectations

Figure 7.5 below shows hospital payments in each six month period.

Figure 7.5 – Hospital Half-Yearly Payments



While there is seasonality, Hospital payments have trended upwards since December 2016 with the latest six-month period now above $7 million. The increase is largely due to higher private hospital costs.

Table 7.8 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 7.8 - Actual vs Expected Payments: Hospital

Accident Period	Payments in Six Months to Dec 19			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.1	(0.0)	-66%
2005/06 - 2014/15	0.3	0.4	(0.1)	-20%
2015/16 - 2016/17	0.4	0.5	(0.1)	-16%
2017/18 - 2018/19	5.3	5.4	(0.2)	-3%
2019/20[1]	2.5	2.4	0.1	4%
Total	8.5	8.7	(0.2)	-3%

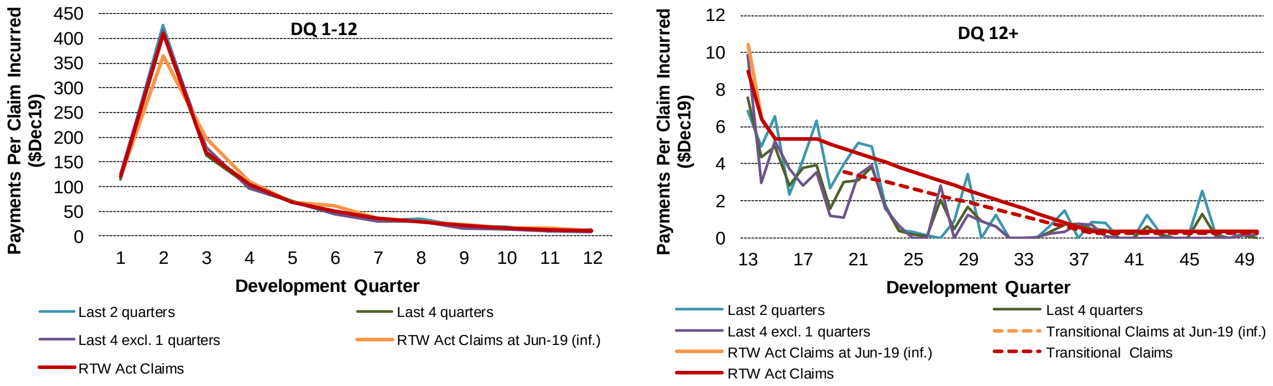
[1] Accidents to Dec19

The bulk of hospital payments are made in the first year or two after injuries occur. Payments in the last six months were slightly lower than expected mainly due to RTW Act accidents.

Valuation Basis

Figure 7.6 below shows the recent experience and selected basis for hospital payments.

Figure 7.6 – Hospital Experience and Selections



The RTW Act PPCI at this valuation has been reshaped with an increase at development quarter two offset by decreases for development quarters three to 13. Our selected basis is in line with the emerging experience over the last two quarters.

The basis for transitional claims is unchanged at this valuation given there have been no material changes in the number of applications made for future surgeries and the proportions of these applications that have been accepted or rejected. Hence, we have not adjusted the allowance for future surgery costs for both transitional claims and RTW Act claims in our existing PPCI patterns; the expected surgery cost for RTW Act claims is higher, as redemptions have not removed claims from the scheme as they did for pre-reform periods.

Valuation Results and Actuarial Release

Table 7.9 sets out the actuarial release resulting from our valuation of hospital payments. The first column represents our projection from the June 2019 valuation.

Table 7.9 – Actuarial Release for Hospital

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.6	0.6	(0.0)	(0.0)	0.0	8%
2005/06 - 2014/15	2.7	2.7	(0.0)	(0.1)	0.1	3%
2015/16 - 2016/17	2.6	2.6	(0.0)	(0.1)	0.1	4%
2017/18 - 2018/19	8.1	7.7	(0.4)	(0.2)	0.6	7%
2019/20[1]	6.9	6.6	(0.3)	0.1	0.2	3%
Total	21.0	20.3	(0.8)	(0.2)	1.0	5%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $0.8 million decrease in the projected liability combined with actual payments being $0.2 million lower than expected results in an actuarial release of $1.0 million.

Table 7.10 breaks down the actuarial release by source.

Table 7.10 – Components of Actuarial Release: Hospital

Release (strengthening) due to		
	$m	$m
AvE payments in six months		0.2
Changes to Valuation Basis		
Ultimate claims	0.2	
PPCIs	0.5	
Subtotal		0.8
Total		1.0

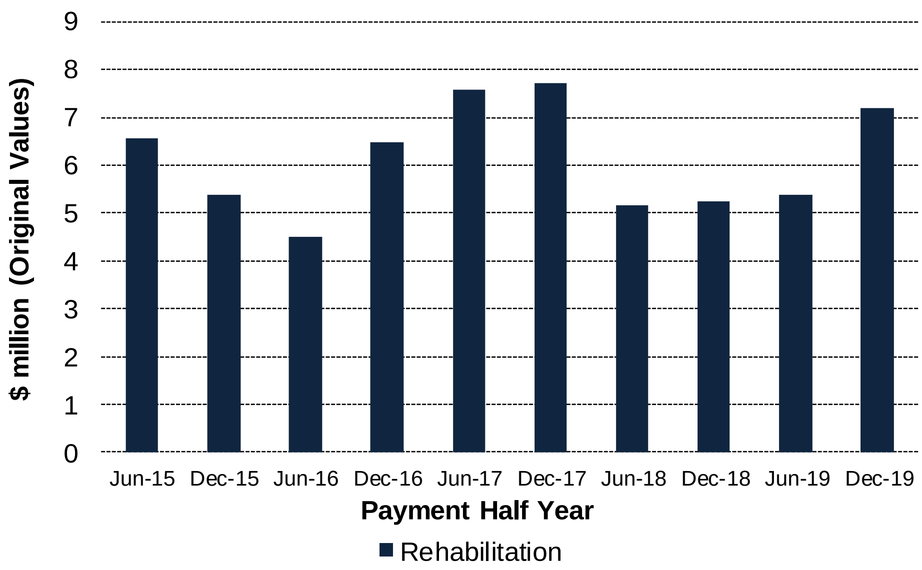
7.6 Rehabilitation

The rehabilitation payment type includes payments made to approved vocational rehabilitation providers and job search agencies.

Payments vs Expectations

Figure 7.7 below shows rehabilitation payments by six month period.

Figure 7.7 – Rehabilitation Half-Yearly Payments



Rehabilitation payments have reverted to a higher level of payments in the last six months after a period of lower payments over the previous 18 months due to operational directives to control rehabilitation spending.

Table 7.11 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 7.11 – Actual vs Expected Payments: Rehabilitation

Accident Period	Payments in Six Months to Dec 19			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.0	0.0	100%
2015/16 - 2016/17	0.4	0.5	(0.0)	-9%
2017/18 - 2018/19	5.8	4.7	1.2	25%
2019/20[1]	0.9	0.7	0.2	28%
Total	7.2	5.9	1.3	22%

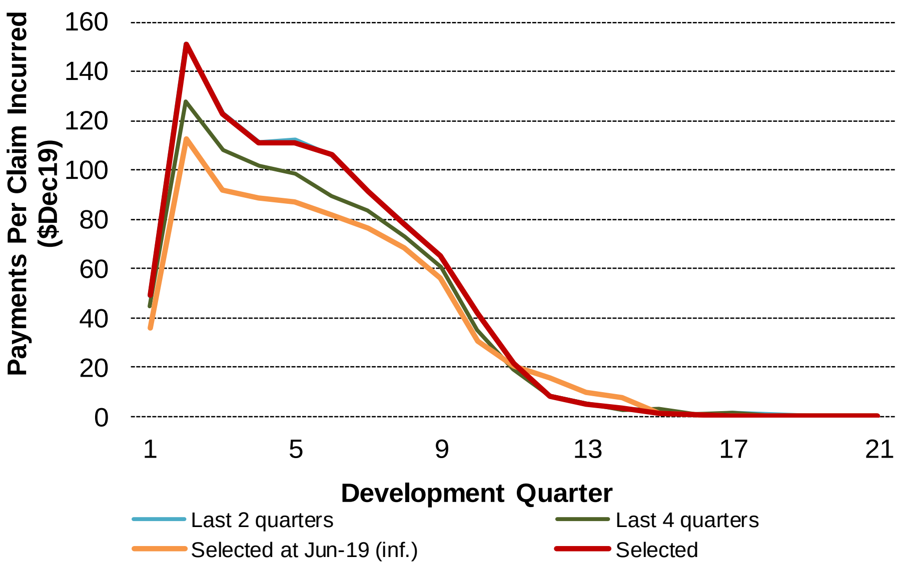
[1] Accidents to Dec19

Overall, payments were $1.3 million higher than expected due to the three latest RTW Act accident years.

Valuation Basis

Figure 7.8 below shows the recent experience and selected basis for rehabilitation payments.

Figure 7.8 – Rehabilitation Experience and Selections



Our PPCI selections at this valuation reflect the increased level of payments in the experience over the last six months. There is essentially no rehabilitation cost after the fourth development year.

Valuation Results and Actuarial Release

Table 7.12 sets out the actuarial release resulting from our valuation of rehabilitation payments. The first column represents our projection from the June 2019 valuation.

Table 7.12 – Actuarial Release for Rehabilitation

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	0.0	
2005/06 - 2014/15	0.0	0.0	(0.0)	0.0	(0.0)	-63%
2015/16 - 2016/17	0.3	0.2	(0.1)	(0.0)	0.1	58%
2017/18 - 2018/19	8.2	9.1	0.9	1.2	(2.0)	-25%
2019/20[1]	5.5	6.6	1.1	0.2	(1.3)	-24%
Total	14.0	15.9	1.9	1.3	(3.2)	-23%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $1.9 million increase in the projected liability combined with actual payments being $1.3 million higher than expected results in an actuarial strengthening of $3.2 million.

Table 7.13 breaks down the actuarial release by source.

Table 7.13 – Components of Actuarial Release: Rehabilitation

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(1.3)
Changes to Valuation Basis		
Ultimate claims	0.2	
PPCIs	(2.1)	
Subtotal		(1.9)
Total		(3.2)

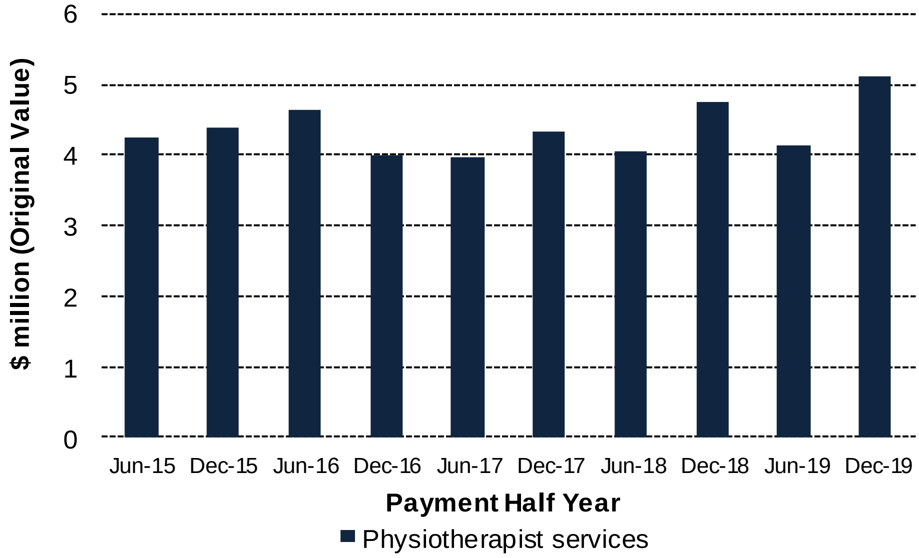
7.7 Physical Therapy

Physical therapy payments are payments made to physiotherapists.

Payments vs Expectations

Figure 7.9 below shows physical therapy payments by six month period over the last five years.

Figure 7.9 – Physical Therapy Half-Yearly Payments



Payments for the last six months have increased to over $5 million after a period of relatively stable payments since December 2016.

Table 7.14 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection. Overall, payments were $0.4 million (9%) higher than expected.

Table 7.14 – Actual vs Expected Payments: Physical Therapy

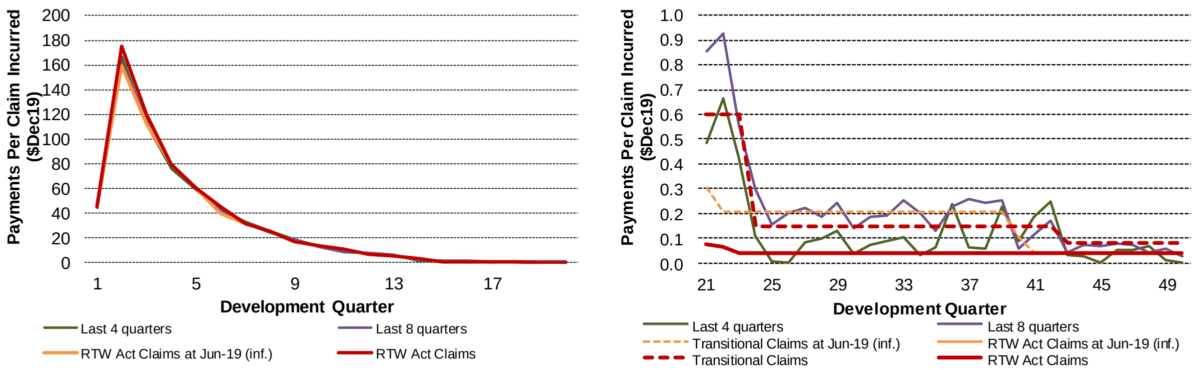
Accident	Payments in Six Months to Dec 19			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	(0.0)	-82%
2005/06 - 2014/15	0.1	0.0	0.0	5%
2015/16 - 2016/17	0.2	0.2	(0.0)	0%
2017/18 - 2018/19	3.8	3.4	0.3	10%
2019/20[1]	1.1	1.0	0.1	11%
Total	5.1	4.7	0.4	9%

[1] Accidents to Dec19

Valuation Basis

Figure 7.10 below shows the recent experience and selected basis for physical therapy payments.

Figure 7.10 – Physical Therapy Experience and Selections



Our basis includes an additional allowance for payments related to pre-approved surgeries for transitional claims for the next 12 months. We have reshaped this allowance to reflect the level of payments observed in the last 12 months.

We have also increased our PPCI Selections for RTW Act claims for development quarters two to six consistent with the emerging experience.

Valuation Results and Actuarial Release

Table 7.15 sets out the actuarial release resulting from our valuation of physical therapy payments. The first column represents our projection from the June 2019 valuation.

Table 7.15 – Actuarial Release for Physical Therapy

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	(0.0)	(0.0)	0.0	19%
2005/06 - 2014/15	0.3	0.3	0.0	0.0	(0.0)	-2%
2015/16 - 2016/17	0.2	0.2	(0.0)	(0.0)	0.0	1%
2017/18 - 2018/19	3.8	3.8	0.0	0.3	(0.3)	-9%
2019/20[1]	3.9	4.0	0.1	0.1	(0.2)	-6%
Total	8.2	8.3	0.1	0.4	(0.6)	-7%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $0.1 million increase in the projected liability combined with actual payments being $0.4 million higher than expected results in an actuarial strengthening of $0.6 million at December 2019.

Table 7.16 breaks down the actuarial change by source.

Table 7.16 - Components of Actuarial Release: Physical Therapy

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(0.4)
Changes to Valuation Basis		
Ultimate claims	0.1	
PPCIs	(0.2)	
Subtotal		(0.1)
Total		(0.6)

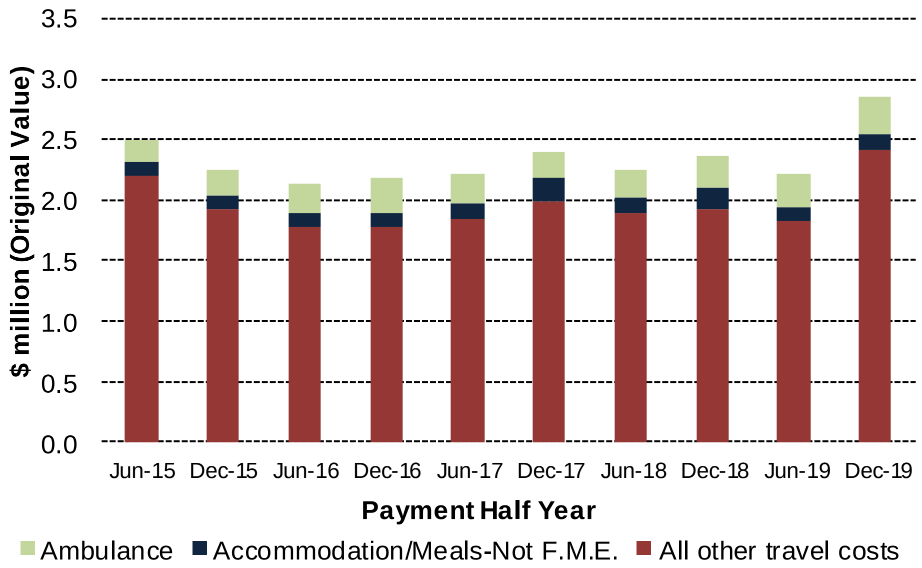
7.8 Travel

Travel payments include payments made for claimant related travel and accommodation.

Payments vs Expectations

Figure 7.11 below shows travel payments by six month period over the last five years.

Figure 7.11 – Travel Half-Yearly Payments



Travel payments increased significantly in the half year to 31 December 2019 and are now above all other half-year periods shown.

Table 7.17 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 7.17 – Actual vs Expected Payments: Travel

Accident Period	Payments in Six Months to Dec 19			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.1	0.1	0.0	19%
2015/16 - 2016/17	0.3	0.2	0.0	5%
2017/18 - 2018/19	2.1	1.7	0.3	20%
2019/20[1]	0.5	0.5	(0.0)	-2%
Total	2.9	2.5	0.4	15%

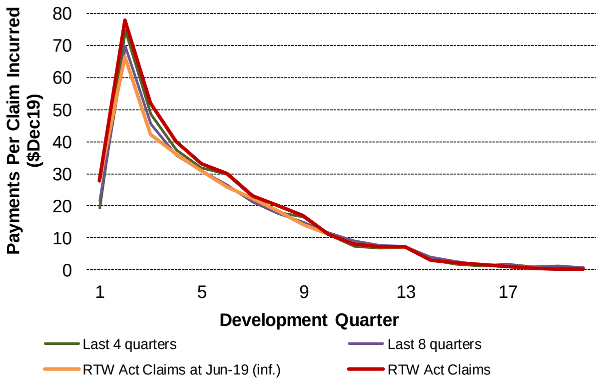
[1] Accidents to Dec19

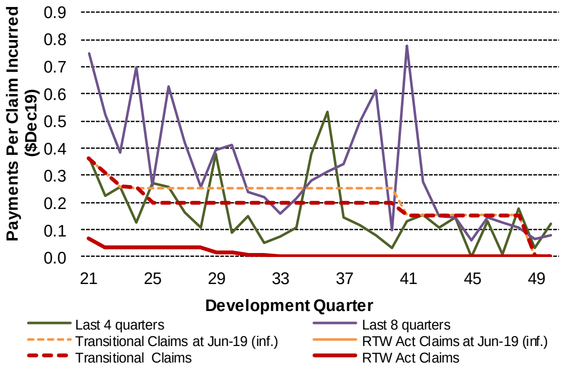
Overall, payments in the last six months were $0.4 million higher than expected largely due to higher payments in 2017/18 and 2018/19.

Valuation Basis

Figure 7.12 below shows the recent experience and selected basis for travel payments.

Figure 7.12 – Travel Experience and Selections





We have increased our selected RTW Act PPCIs for development periods two to nine reflecting the higher payments observed in the experience over the last four quarters. Travel costs for transitional claims over the next 12 months are largely related to pre-approved surgeries. We have reduced our allowance at this valuation in line with the emerging experience as the number of remaining surgeries reduce.

Valuation Results and Actuarial Release

Table 7.18 sets out the actuarial release resulting from our valuation of travel payments. The first column represents our projection from the June 2019 valuation.

Table 7.18 – Actuarial Release for Travel

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	
2005/06 - 2014/15	0.1	0.1	(0.0)	0.0	(0.0)	-3%
2015/16 - 2016/17	0.2	0.2	(0.0)	0.0	(0.0)	-5%
2017/18 - 2018/19	3.0	3.1	0.1	0.3	(0.5)	-17%
2019/20[1]	2.1	2.3	0.2	(0.0)	(0.2)	-10%
Total	5.4	5.7	0.3	0.4	(0.7)	-13%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $0.3 million increase in the projected liability combined with actual payments being $0.4 million higher than expected results in an actuarial strengthening of $0.7 million at December 2019.

Table 7.19 breaks down the actuarial strengthening by source.

Table 7.19 - Components of Actuarial Release: Travel

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(0.4)
Changes to Valuation Basis		
Ultimate claims	0.1	
PPCIs	(0.4)	
Subtotal		(0.3)
Total		(0.7)

8 Other Entitlements – Short Term Claims

This section presents results for the remaining entitlements. These include legal and investigation costs, recoveries, common law, LOEC, and commutations.

8.1 Summary of Results

Table 8.1 summarises the movements in our liability estimates for the remaining entitlement groups since the June 2019 valuation.

Table 8.1 – Valuation Results: Other Payment Types

	Worker Legal	Corporation Legal	Invest-igation	Common Law	LOEC	Commu-tation	Recoveries	Total
Jun19 Valuation	$m	$m	$m	$m	$m	$m	$m	$m
Estimated Liab at Jun-19	41.9	34.0	2.3	2.7	0.5	2.2	(25.6)	57.9
Projected Liab at Dec-19	40.8	33.5	2.3	2.7	0.5	2.2	(26.3)	55.7
Dec-19 Valuation								
Impact of experience/OSC - Movement in liab	2.5	2.9	(0.1)	0.0	0.4	(0.0)	(5.2)	0.4
Estimated Liab at Dec-19 (Jun-19 eco assumptions)	**43.3**	**36.4**	**2.2**	**2.7**	**0.8**	**2.2**	**(31.5)**	**56.1**
Impact of change in eco assumptions	0.1	0.0	0.0	0.0	0.0	0.0	(0.1)	0.1
Estimated Liab at Dec-19 (Dec-19 eco assumptions)	**43.4**	**36.4**	**2.2**	**2.8**	**0.8**	**2.2**	**(31.6)**	**56.2**
AvE Payments - six months to Dec-19	0.8	0.5	(0.0)	(0.2)	(0.0)	(0.2)	(2.3)	(1.5)
Actuarial Release at Dec-19	(3.3)	(3.4)	0.1	0.2	(0.4)	0.2	7.5	1.1

The movements from our June 2019 projection of the December 2019 liability are:

- An increase of $0.4 million in the liability, reflecting the claims experience since June 2019 and our valuation response. Offsetting this is payments being $1.5 million lower than expected, this produces an actuarial release of $1.1 million.
- The change in economic assumptions at the current valuation has little impact overall on other Entitlements.

8.2 Worker Legal

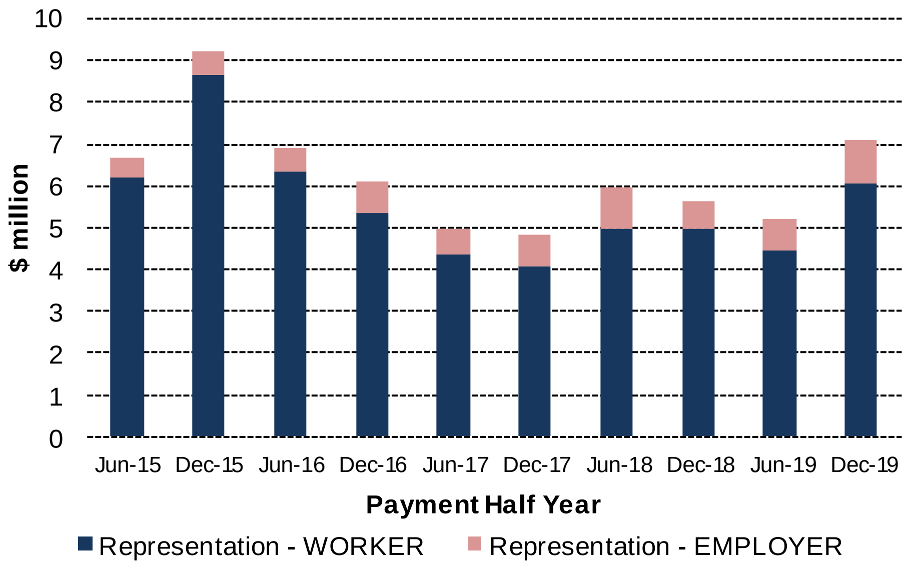
Our valuation of legal costs separately models legal fees paid to ReturnToWorkSA's contracted legal advisers (Minter Ellison and Sparke Helmore), which we call 'corporation legal', and legal fees paid to workers' representatives and employers, which we call 'worker legal'. This section describes the Worker Legal results, with Section 8.3 discussing ReturnToWorkSA's legal results.

Disputes are the main driver of expenditure for both worker and corporation legal fees, and were discussed in Section 3.3.2. Worker legal accounts are generally only submitted upon completion of the dispute and therefore any changes in dispute numbers will usually involve a delay before they are translated into changes in worker legal costs. Corporation legal fees on the other hand are paid at commencement of the dispute and will usually reflect changes in underlying dispute numbers without delay.

8.2.1 Experience

Figure 8.1 below shows worker legal payments in each six month period over the last five years.

Figure 8.1 – Worker Legal Half Yearly Payments



Worker legal payments peaked in the December 2015 half-year and then reduced over the two years to December 2017. This reduction in payments follows the reduction in dispute numbers during the 2015/16 year, reflecting the long delay between lodgement of disputes and payment of worker legal fees. Payments in the last six months increased significantly and is the highest it's been since December 2015. As shown in Section 3.3.2, there still remains a large number of open disputes in the scheme.

Disputes being lodged for RTW Act claims have increased to around 150 per month over the last half-year due to emerging lump sum disputes from increased WPI assessments. This is still lower than the longer-term average level of around 200 disputes per month for pre-RTW Act periods. While it remains to be seen if the lower level of disputes can be maintained going forward once more WPI assessments are completed for RTW Act claims, on current trends dispute numbers should still remain below 200 per month.

Table 8.2 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 8.2 – Actual vs Expected Payments: Worker Legal

Accident Period	Payments in Six Months to Dec 19			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.3	0.0	0.3	1669%
2005/06 - 2014/15	2.6	2.7	(0.1)	-4%
2015/16 - 2016/17	2.2	1.7	0.5	30%
2017/18 - 2018/19	1.9	1.8	0.1	5%
2019/20[1]	0.0	0.0	0.0	71%
Total	7.1	6.3	0.8	13%

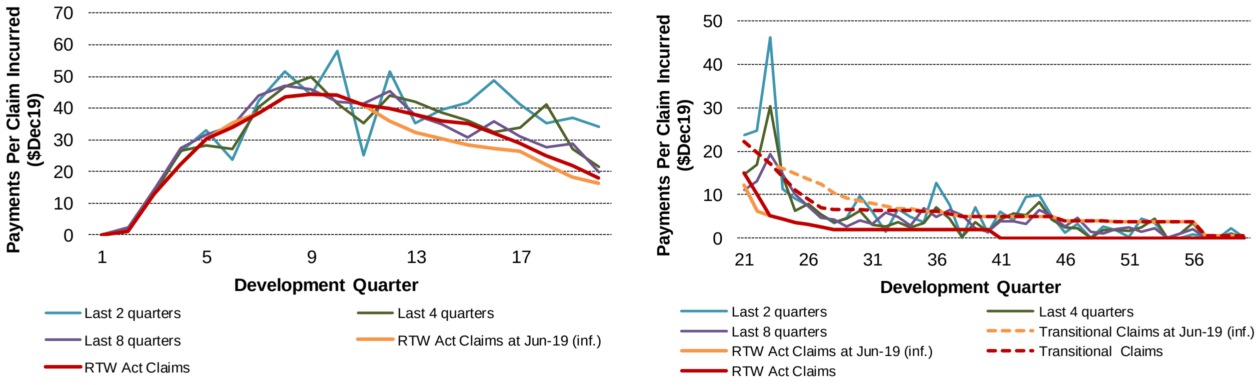
[1] Accidents to Dec19

Overall, payments in the six months to December 2019 were higher than expected by 13%, with the increase occurring across most accident periods.

8.2.2 Valuation Basis

A PPCI model is used to value Worker Legal fees. Figure 8.2 below shows the recent experience and selected basis for worker legal payments.

Figure 8.2 – Worker Legal Experience and Selections



For transitional claims, we have increased our valuation basis by around $0.3 million (discounted) at this valuation. This is the net impact of higher payments in the tail to reflect the high number of open disputes currently in the scheme and their continued progression through to the later stages of the dispute resolution process, partly offset by the lower number of open disputes from the faster settlement activity in the last six months.

Our revised valuation basis of around $16.0 million (discounted) for transitional worker legal costs allows for some further progression of currently open disputes, along with around 250 further new disputes to be lodged (at a lower cost) before the transitional cohort is fully runoff.

We have also increased our PPCIs for RTW Act periods with higher selections for development quarters 12 to 22 in light of the higher payments in the emerging experience. We have not fully responded to the higher payments as we anticipate this to be a temporary feature of the experience given the high number of open disputes currently in the scheme. If this is not a temporary feature, then the valuation basis is likely to need to be increased in future.

8.2.3 Valuation Results and Actuarial Release

Table 8.3 sets out the actuarial release resulting from our valuation of worker legal payments. The first column represents our projection from the June 2019 valuation.

Table 8.3 – Actuarial Release for Worker Legal

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.6	0.5	0.3	(0.8)	-23407%
2005/06 - 2014/15	15.6	15.4	(0.2)	(0.1)	0.3	2%
2015/16 - 2016/17	5.3	6.0	0.7	0.5	(1.2)	-23%
2017/18 - 2018/19	14.9	16.0	1.2	0.1	(1.3)	-9%
2019/20[1]	5.0	5.2	0.3	0.0	(0.3)	-6%
Total	40.8	43.3	2.5	0.8	(3.3)	-8%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The actuarial strengthening of $3.3 million is due to liability increases of $2.5 million combined with actual payments being $0.8 million higher than expected.

Table 8.4 breaks down the actuarial change by source.

Table 8.4 – Components of Actuarial Release: Worker Legal

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(0.8)
Changes to Valuation Basis		
Ultimate claims	0.4	
PPCI increase for RTW Act Claims	(2.2)	
PPCI increase for Transitional Claims	(0.7)	
Subtotal		(2.5)
Total		(3.3)

8.3 Corporation Legal

Corporation Legal refers to the legal fees paid to ReturnToWorkSA's contracted legal advisers. Since 1 January 2013 there have been two legal service providers, Minter Ellison and Sparke Helmore, who were originally paid fees based on the number of matters handled and the complexity of these matters.

Beginning in 2016, an annual contract was agreed upon whereby the contracted legal advisers would be paid a pre-determined fixed fee each month throughout the contract period. Fees for advice and representation pertaining to complex cases are paid at the same rate outlined in the previous contract in addition to the fixed fee each month. This contract has been extended each year since with revised fixed fees.

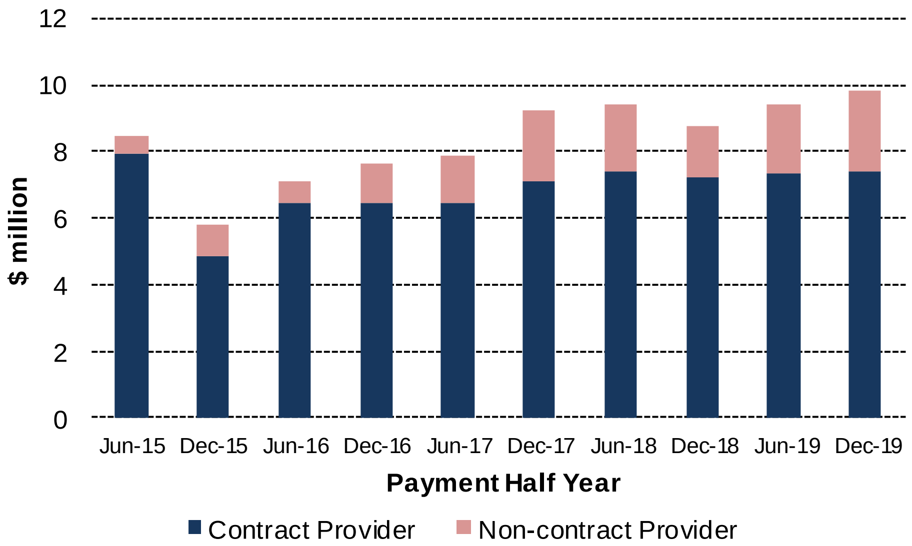
A performance fee is also payable at the end of each contract half-year based on the achievement of certain performance outcomes. This fee is unchanged for the FY2020 contract.

In addition to the two main legal service providers, ReturnToWorkSA also pay additional providers legal fees related to third party recoveries, staff claims and extra-ordinary matters. These providers are referred to as "non-contract" providers in the remainder of this section.

8.3.1 Experience

Figure 8.3 below shows Corporation Legal payments in each six month period over the last five years.

Figure 8.3 – Corporation Legal Half Yearly Payments



Corporation Legal expenditure in the six months to December 2019 is higher than the June 2019 half-year and remains higher than recent periods due to higher "non-contract" fees. The high amount of "non-contract" fees reflect the high number of legal matters in the Supreme Court as discussed in Section 3.3.2.

Table 8.5 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 8.5 – Actual vs Expected Payments: Corporation Legal

Accident	Payments in Six Months to Dec 19			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
Total	9.8	9.4	0.5	5%

[1] Accidents to Dec19

Overall, actual payments were $0.5 million (5%) higher than expected driven by higher "non-contract" payments. A breakdown by accident period is not possible as Corporation Legal payments are not allocated to individual claims.

8.3.2 Valuation Basis

Under the current contract, a fixed amount is paid to both legal providers each month regardless of the number of non-complex matters referred. Table 8.6 below summarises the payments applicable under the current contract.

Table 8.6 – Corporation Legal Contract Components

	Contract Terms
Matter Type	Current
Advice only	Fixed Fee per month
Dispute representation	Fixed Fee per month
Complex matters	Paid per matter
Performance Fee	Paid at the end of year

To project the future costs of Corporation Legal we have:

- Adopted the fixed monthly fees payable to each provider under the contract
  - The fixed fee per month is unchanged for the June 2020 half-year and reflects the terms of the FY2020 contract. Beyond the current contract, the fees are estimated to remain at a similar level reflecting the recent stability in the number of new disputes in the scheme.
- Estimated the number of complex matters that will be referred each year for the duration of the contract and multiplied this by the relevant fees as specified in the contract terms
  - We have made an allowance for payments of $180,000 per half-year due to the high number of complex matters currently open for transitional claims.
- Allowed for payment of additional performance fees as specified in the terms of the contract as well as outstanding performance fees payable under the previous contract
- Allocated the cash flows in each payment year across accident periods
- Estimated a separate allowance for matters handled by “non-contract” providers.
  - Our base allowance of $1.2 million per half year has increased by $100,000 from our previous valuation and reflects the higher volume of complex cases under the RTW Act than previously anticipated
  - We have extended and increased our temporary allowance of $1.5 million per half-year (from $1.0 million per half-year) until March 2021 (additional nine months) for Supreme Court matters reflecting the current delay in resolving these matters.

Beyond the current contract, payments for Corporation Legal are projected to increase in line with inflation.

The allocation of cash flows across accident periods is based on the observed experience in Worker Legal costs, with an adjustment to reflect the quicker payment pattern of Corporation Legal costs. As transition claims run-off, dispute lodgements are expected to occur earlier due to the shorter duration of claims under the RTW Act.

8.3.3 Valuation Results and Actuarial Release

Table 8.7 sets out the actuarial release resulting from our valuation of Corporation legal payments. The first column represents our projection from the June 2019 valuation.

Table 8.7 - Actuarial Release for Corporation Legal

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
Total	33.5	36.4	2.9	0.5	(3.4)	-10%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

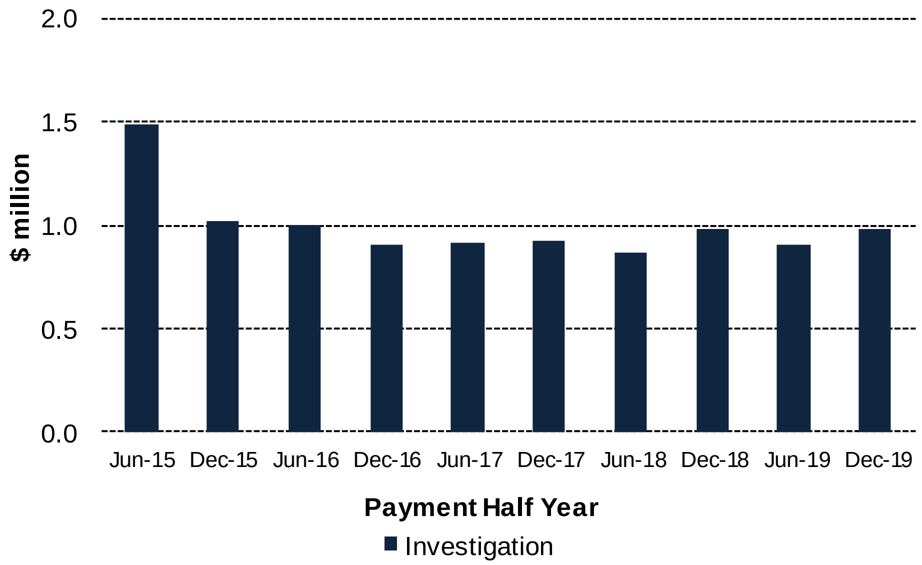
The $2.9 million increase in the projected liability combined with actual payments being $0.5 million higher than expected results in an actuarial strengthening of $3.4 million. Of the $2.9 million increase in the projected liability, $1.6 million was due to increased allowances for Supreme Court matters and the remaining $0.8 million was due to a higher base allowance for non-contract providers and increase in complex matter fees.

8.4 Investigation

8.4.1 Experience

Figure 8.4 below shows investigation payments in each six month period over the last five years.

Figure 8.4 – Investigation Half Yearly Payments



Investigation spending in the six months to December 2019 were around $1 million and is consistent with the level of payments since the December 2015 half-year.

Table 8.8 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 8.8 – Actual vs Expected Payments: Investigation

Accident	Payments in Six Months to Dec 19			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.1	0.1	0.0	0%
2015/16 - 2016/17	0.1	0.1	(0.0)	-25%
2017/18 - 2018/19	0.6	0.7	(0.0)	-7%
2019/20[1]	0.3	0.2	0.0	22%
Total	1.0	1.0	(0.0)	-2%

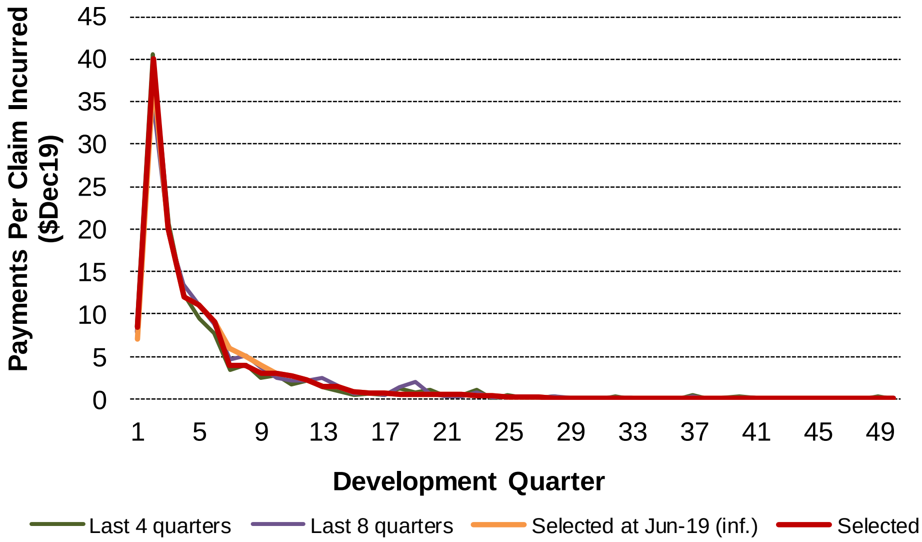
[1] Accidents to Dec19

Overall actual payments were broadly in line with expectations, with slightly higher payments in the most recent accident year offset by lower payments in the earlier RTW Act accident periods.

8.4.2 Valuation Basis

A PPCI model is used to value investigation payments. Figure 8.5 below shows the recent experience and selected basis.

Figure 8.5 – PPCI Experience and Selections: Investigation



We have reshaped the adopted PPCIs at this valuation resulting in an overall slight reduction in the liability. We have not allowed for a different PPCI pattern for transitional claims up to 30 June 2015 on materiality grounds.

8.4.3 Valuation Results and Actuarial Release

Table 8.9 sets out the actuarial release resulting from our valuation of investigation payments. The first column represents our projection from the June 2019 valuation.

Table 8.9 - Actuarial Release for Investigation

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	0.0	
2005/06 - 2014/15	0.2	0.2	(0.0)	0.0	0.0	1%
2015/16 - 2016/17	0.2	0.2	(0.0)	(0.0)	0.0	10%
2017/18 - 2018/19	1.0	1.0	(0.1)	(0.0)	0.1	13%
2019/20[1]	0.8	0.8	(0.0)	0.0	(0.0)	-1%
Total	2.3	2.2	(0.1)	(0.0)	0.1	6%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The $0.1 million decrease in the projected liability results in an actuarial release of $0.1 million.

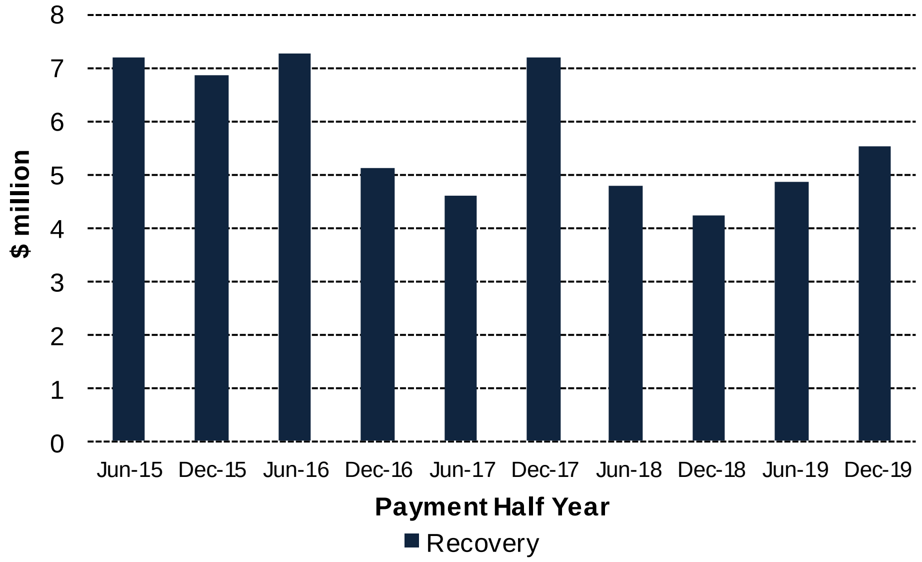
8.5 Recoveries

Recoveries can be made by ReturnToWorkSA from overpayments to workers, from the Motor Accidents Commission (MAC) and private insurers for CTP claims, or from third parties for recoveries relating to negligence claims. Third parties for negligence claims will often be companies engaged in labour hire and owners or head contractors on construction sites, as ReturnToWorkSA cannot recover money from an employer for negligence.

8.5.1 Experience

Figure 8.6 below shows recovery payments in each six month period over the last five years.

Figure 8.6 – Recovery Half Yearly Payments Received



Following a period of generally lower recoveries since 2016, recovery payments have continued to increase over the last year in line with increasing gross payment levels.

Table 8.10 compares the payments in the six months to 31 December 2019 with the expected payments from our June 2019 valuation projection.

Table 8.10 – Actual vs Expected Payments: Recoveries

Accident Period	Payments in Six Months to Dec 19			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	(0.0)	0.0	(0.0)	n/a
2005/06 - 2014/15	(3.8)	(1.5)	(2.3)	151%
2015/16 - 2016/17	(1.1)	(1.0)	(0.1)	6%
2017/18 - 2018/19	(0.7)	(0.7)	0.0	-3%
2019/20[1]	(0.0)	(0.0)	0.0	-39%
Total	(5.5)	(3.2)	(2.3)	72%

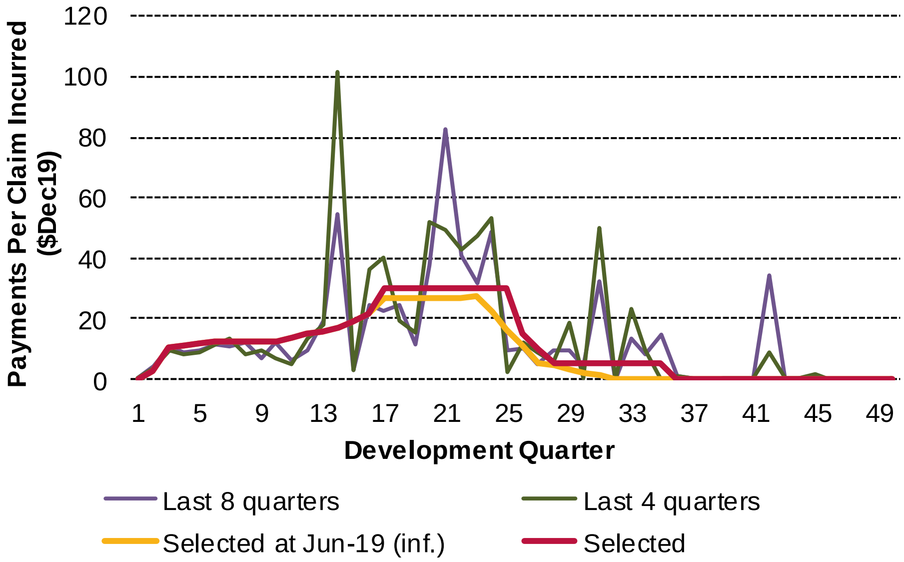
[1] Accidents to Dec19

Actual recovery payments were $2.3 million higher than expected largely due to Old Act claims. This was due to two large recoveries of around $0.6 million each that were received over the last six months.

8.5.2 Valuation Basis

A PPCI model is used for recovery payments. Figure 8.7 below shows the recent experience and selected basis.

Figure 8.7 – PPCI Experience and Selections: Recoveries



Our selected recovery PPCI assumptions have increased at this valuation for development quarters 17 to 35 and gives weight to the higher recoveries in the recent experience. Our selection does not fully reflect the recent experience due to our expectation of the lower recoverability of costs going forward under the RTW Act (where gross payments are lower), and following CTP reforms in 2014.

8.5.3 Valuation Results and Actuarial Release

Table 8.11 sets out the actuarial release resulting from our valuation of recovery payments. The first column represents our projection from the June 2019 valuation.

Table 8.11 – Actuarial Release for Recoveries

Accident Period	Projected Liab at Dec 19 from Jun 19 Valuation[1]	Dec 19 Estimate on Jun 19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Dec 19	Actuarial Release[2]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	(0.0)	0.0	
2005/06 - 2014/15	(2.5)	(2.5)	0.0	(2.3)	2.3	-92%
2015/16 - 2016/17	(7.7)	(9.9)	(2.2)	(0.1)	2.2	-29%
2017/18 - 2018/19	(12.4)	(14.8)	(2.4)	0.0	2.4	-19%
2019/20[1]	(3.7)	(4.3)	(0.6)	0.0	0.6	-17%
Total	(26.3)	(31.5)	(5.2)	(2.3)	7.5	-29%

[1] Accidents to Dec19

[2] Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The overall actuarial release of $7.5 million is a combination of actual recoveries being $2.3 million above expectations combined with an increase of $5.2 million in expected future recoveries.

8.6 LOEC, Commutations, and Common Law

LOEC, Commutations, and Common Law are minor entitlements with little outstanding claims liability.

8.6.1 LOEC

Loss of Earning Capacity (LOEC) claims are a legacy feature of the portfolio, and are valued together with Short Term claims. At 31 December 2019, there are only five remaining claims. At this valuation, we have adjusted our modelling to take into account the higher retirement age for workers born after 1951. This change has resulted in an increase in the liability of $0.4 million.

8.6.2 Commutations

Commutation payments relate to claims receiving dependant benefits. Payments made in the last six months were nil and we have maintained our basis at this valuation.

8.6.3 Common Law

There were no common law payments in the last six months. The common law entitlement for short term claims relates to a small number of infrequent but relatively large claims related to other jurisdictions, and needs to be considered over long time horizons. Having taken this into consideration we have left the valuation basis unchanged.

Common law entitlements for some Serious Injury claims are considered in Section 9.

9 Serious Injury Claims

9.1 Overall Results

Table 9.1 shows the central estimate of Serious Injury claims costs at 31 December 2019 and movement in our liability estimates since the June 2019 valuation.

Table 9.1 – Serious Injury claims Valuation Results (excluding CHE)

	Income Support	Medical	Other (Care)	Hospital	Travel	Rehabilitation	Physical Therapy	Investigation	Legal - Non-Contract	Legal Contract	Lump sums	Recoveries	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
Jun-19 Valuation													
Estimated Liab at Jun-19	443	604	445	122	57	21	35	1	12	12	92	-30	1,814
Projected Liab at Dec-19	457	632	459	129	60	23	38	1	12	12	86	-31	1,877
Dec19 Valuation													
Impact of experience/basis change	-3	-14	18	-9	-2	-2	3	0	0	0	8	-2	-3
Estimated Liab at Dec19 (Jun19 ecos)	**454**	**618**	**477**	**120**	**58**	**20**	**41**	**1**	**12**	**12**	**94**	**-34**	**1,874**
Impact of change in ecos	1	-3	-2	-1	0	0	0	0	0	0	0	0	-4
Estimated Liab at Dec19 (Dec19 ecos)	**455**	**615**	**475**	**119**	**58**	**20**	**41**	**1**	**12**	**12**	**94**	**-34**	**1,870**
AvE Payments - six months to Dec-19	3	0	1	1	0	0	0	0	1	0	-9	-1	-5
Actuarial Release at Dec-19	1	14	-19	8	2	2	-3	0	-1	0	1	3	8

The outstanding claims cost for Serious Injury claims (excluding CHE) is $1,870 million at 31 December 2019. The main movements from our June 2019 projection of the December 2019 liability are:

- Claims experience and basis changes reduced the liability by $3 million, as a result of:
  - Net changes to claim numbers (including IBNR claims assumptions) decreasing the liability by $17 million, predominantly related to the EnABLE cohort
  - Updated estimates for one very high cost EnABLE claim increasing the liability by $7 million
  - Updated lifetables increasing the liability by $7 million
- The change in economic assumptions at the current valuation leading to a small decrease of $4 million. The impact of the change in economic assumptions is discussed in Section 11.3.2.

The remainder of this section deals with the claims experience and basis changes.

9.2 Background

"Serious Injury" claims are those with WPI of 30% or more, who are eligible to receive Income Support to retirement and other benefits for life under the RTW Act.

As Serious Injury claims were not identified before the RTW Act commenced, there is uncertainty as to the precise number and characteristics of the now Serious Injury cohort. Our Serious Injury cohort includes:

- Known Serious Injury claims, comprising:
  - Claims managed internally by ReturnToWorkSA in the EnABLE group, which generally are more like Severe Traumatic Injuries (i.e. they require significant levels of care and support, or else have other special needs)
  - Other Serious Injuries with a confirmed WPI assessment of 30% of more, but not internally managed by ReturnToWorkSA

- Other 'potential' Serious Injury claims – these are claims who have not yet been formally assessed as Serious Injury, but who are considered likely to do so at some point in future.
    - ReturnToWorkSA proactively identify 'potential' Serious Injury claims prior to an official assessment, with claims identified through this process included in our valuation. ReturnToWorkSA's approach for identifying these claims is still evolving, meaning it is difficult to compare accident years at the same point of development; nevertheless we view proactive identification as a positive from both a claims management and valuation point of view.
    - For older accident years, there is a pool of claims that have features that indicate they would have likely been a Serious Injury claim, but have ceased interaction with the Scheme before a formal assessment took place (for reasons such as redemptions). As there is no future liability associated with these claims, there is no need for ReturnToWorkSA to make a clear determination on their Serious Injury status, and as such these remain 'potential' Serious Injury claims. However, we continue to count them as a Serious Injury claims for valuation purposes in order to understand potential numbers and trends in high severity claims over time.
- IBNR claims – Serious Injury claims that will be identified in future.

Section 4.2 describes our projection of serious injury claim numbers.

9.3 Valuation Approach

As Serious Injury claims are essentially entitled to lifetime benefits, it is important to consider the characteristics of individual claims when projecting future costs. Our valuation approach therefore projects future claim costs individually for each claim by payment type.

Due to significant differences in the level of incapacity and associated treatment and care costs, we have separately modelled 'Severe Traumatic Injury' claims and 'Other Serious Injury' claims, and our assumptions have been set as described in Appendix A and summarised in the following table.

Table 9.2 – Approach to Setting Valuation Assumptions for Serious Injury claims[1]

	Severe Traumatic Injuries	Other Serious Injury
Life expectancy	Mortality improvement of 1.5% p.a. Mortality loadings for claims with high care needs (reducing life expectancy by 19 years) and for moderate care needs (reducing life expectancy by 7 years).	Mortality improvement of 1.5% p.a.
Income Support	To retirement age on all operationally active claims. Based on historical experience and estimates provided by ReturnToWorkSA.	To retirement age on all operationally active claims. Based on historical experience.
Treatment Related Costs and Other[2]	Paid for life. Based on historical experience and estimates provided by ReturnToWorkSA, with the exception of Hospital costs, which are based on selected payment per active claim curves for this cohort. Allowance for IBNER on Other and	Paid for life. Early duration claims (in the treatment and recovery phase) based on payment per active claim curves selected from this cohort. Mid-to-long duration claims (in the maintenance phase) based on historical

	Severe Traumatic Injuries	Other Serious Injury
	Medical costs above identified costs.	experience.
Lump sums[3]	Paid to claimants who have not already had a lump sum, based on assessed WPI, or an assumed average WPI if no assessment has been undertaken as yet.	
Legal and Investigation	Legal costs are modelled as a percentage of IS costs, net of payments to date. An average ultimate investigation cost is made per claim, net of payments to date.	Modelled as payment per claim incurred.
Recoveries	Projected on claims identified by ReturnToWorkSA as having recovery potential.	Applied a recovery as a proportion of gross payments for future periods.
Common Law	Not available to pre-1 July 2015 claims, and included in the cost of statutory entitlements for post-1 July 2015 claims.	
Future cost escalation	WCI: Income Support AWE: Recoveries, Treatment and Other, Legal and Investigation Superimposed: 2% p.a. on Treatment and Other Needs Utilisation: 75% loading applied at age 65 on Treatment and Other, capped at 30 hours of care per day	WCI: Income Support AWE: Recoveries, Treatment and Other, Legal and Investigation Superimposed: 2% p.a. on Treatment and Other
IBNR Assumptions	IBNR claims in the latest four accident years only. Claim size based on historical experience of current claims.	IBNR claims on all accident years, reflecting outstanding Serious Injury applications and WPI disputes (for older accident periods) and the delay from injury to WPI assessment (for newer accidents). Claim size based on historical experience of current known and potential claims.

[1] Projected costs are those paid after the claim has been identified as Serious Injury.

[2] Treatment related costs relate to Medical (including Aids and Appliances), Hospital, Rehab, Physio and Travel. Other costs have been split into "Care" and "Other" for the purposes of the valuation. Care relates to services such as attendant, respite and/or nursing care. The remaining payments in 'Other' mainly relate to home and vehicle modifications and domestic services.

[3] Impairment lump sum only. Serious Injury claims are not entitled to the Future Economic Loss lump sum.

The Severe Traumatic valuation is reliant on estimates provided by ReturnToWorkSA. The process for providing these estimates was revised 18 months ago and as ReturnToWorkSA has become more familiar with this process we are seeing less large movements from valuation to valuation, with estimates reflecting changes in claimant circumstances rather than short-term volatility in benefit utilisation.

The approach to modelling Other Serious Injuries smooths out volatility seen early in the life of many Serious Injury claims, to reflect the general reduction in medical and related costs as claims move from the initial 'recovery' phase in the first few years to a longer term 'maintenance' level. The key features are:

- Aggregate models were built for all payment types, with the exception of Lump Sums
- The models selected for each payment type are as follows:

- Income Support, Treatment and Other – Payments per Active Claim. The only decrement for Treatment and Other payments is mortality, while Income Support payments have an additional decrement for retirement.
- Legal and Investigation – Payments per Claim Incurred
- Recoveries – Proportion of Gross Payments

- These models were adopted for the following:
  - All IBNR claims and future accident years
  - All Legal, Investigation and Recovery payments
  - All Treatment and Other payments for claims less than five years old. The utilisation of these benefits tends to be heightened at early durations, making it difficult to select future payment levels based on a claimant's actual historical experience. When aggregated across all claims the shape to this utilisation can be captured and applied up to a point (that has been selected as five years) where the Treatment and Other needs have stabilised.

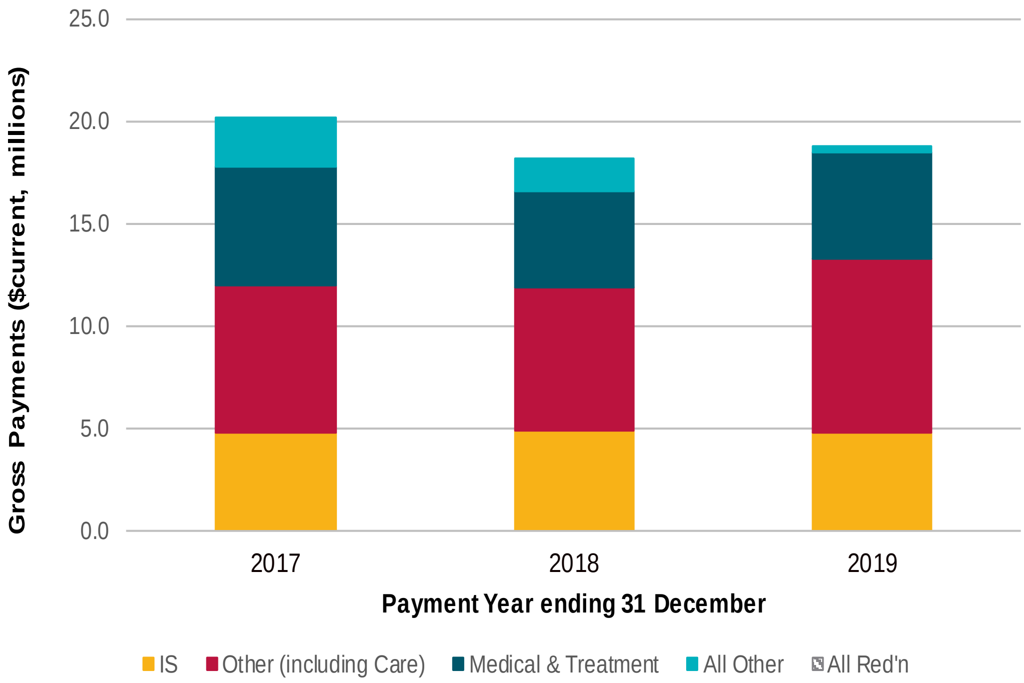
One of the key determinants of very long term costs will be how much, if any, of the costs associated with ageing are compensated out of the compensation scheme. Based on the experience to date, albeit on a relatively small number of claims who have been through this process, the costs for age related care and support are being handled consistently with the current understanding of the approach to aged care related costs being funded. If this changes then the cost implications would likely be significant.

9.4 Valuation of Severe Traumatic Injury claims

9.4.1 Payments by Type

Figure 9.1 shows claim payments over the past three years for Severe Traumatic Injury claims.

Figure 9.1 – Severe Traumatic Injury Claim Payments ($Dec19)



$57 million has been paid to Severe Traumatic Injury claims in the last three years. After allowing for recoveries of $3 million over this same period and excluding redemptions, this equates to an average of around $18 million per annum in net claim payments (inflated to 31 December 2019 values), comprising around:

- $8 million per annum in care and other costs
- $5 million per annum in medical, treatment and related benefits
- $5 million per annum in Income Support
- $1 million per annum in lump sums
- Small amounts of legal and investigation payments ($0.4 million per annum)
- $1 million per annum in recoveries.

9.4.2 Claimant Profile

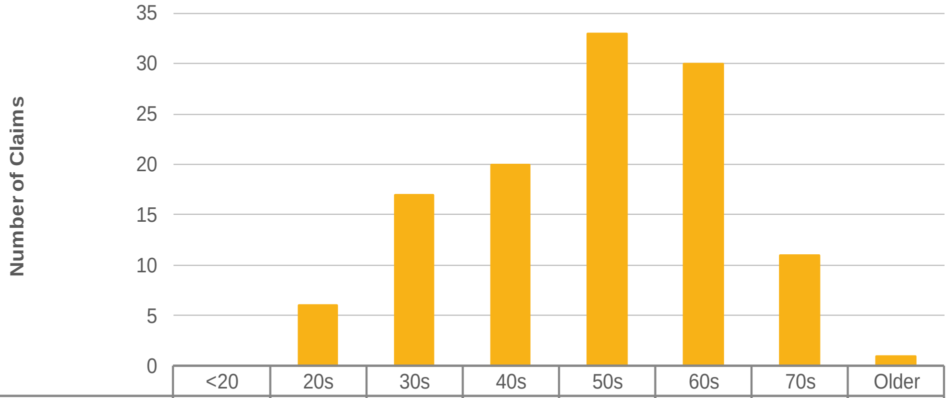
Figure 9.2 shows the number of active Severe Traumatic Injury claims (i.e. those being valued) at the current and previous valuations, along with the reasons for movement in the number of claims being valued.

Figure 9.2 – Movement in Severe Traumatic Injury Claim Numbers

There are 118 active (i.e. with expected ongoing benefits) Severe Traumatic Injury claims at December 2019, compared to 117 at the previous valuation. This was the result of one claimant dying, one claim transferring from the Other Serious Injury cohort, and one newly identified Severe Traumatic Injury claim.

Figure 9.3 shows the age and life expectancy of the current Severe Traumatic Injuries.

Figure 9.3 – Age Distribution and Life Expectancy (in years) of Severe Traumatic Injuries



	<20	20s	30s	40s	50s	60s	70s	Older
Number of Claims	0	6	17	20	33	30	11	1
Loaded Life Expectancy	0	61	46	39	27	20	13	5

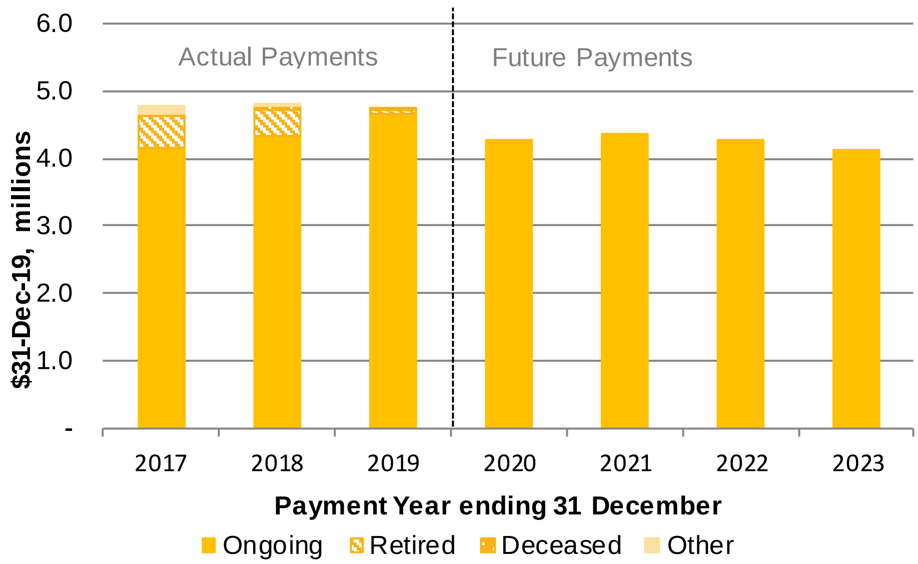
Severe Traumatic Injury claimants are currently around 55 years old on average, with an expected future life expectancy of around 30 years (after allowing for mortality, mortality improvements and mortality loadings). The average age at injury was about 40 years.

Over half of the current Severe Traumatic Injuries have a WPI assessment, with an average WPI of around 56%; the relatively low completion rate is partly explained by older claims being paid their lump sum prior to the introduction of WPI assessments in 2009. At this valuation, there are 11 claims with recorded WPI assessments less than 30%; ignoring these claims, the average assessed WPI is close to 60%.

9.4.3 Income Support

Figure 9.4 shows historic and projected Income Support payments for Severe Traumatic Injury claims (including IBNR claims, but only on existing accident years).

Figure 9.4 – IS Payments: Severe Traumatic Injury Claims ($Dec19)

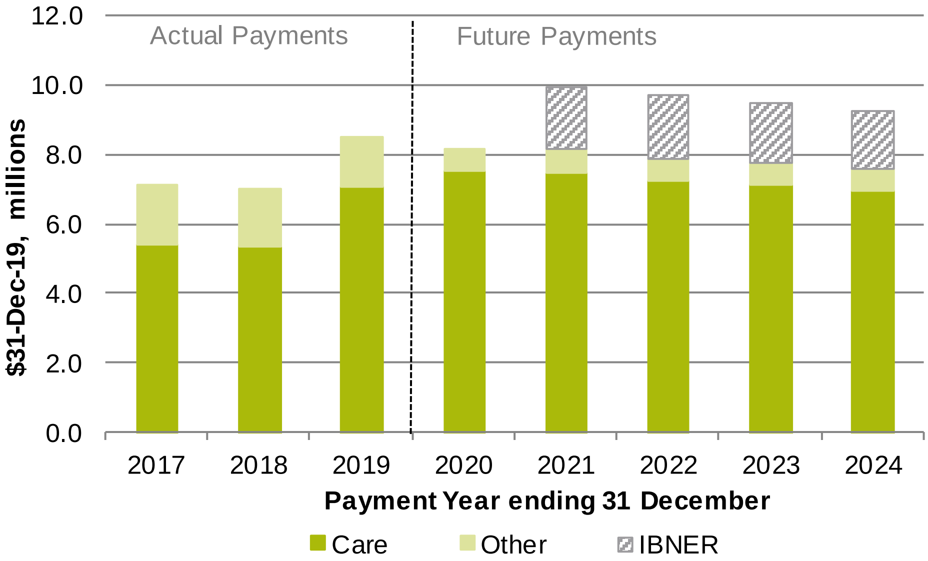


We estimate around $4.3 million will be paid in Income Support to Severe Traumatic Injury claims in 2020. Future payments reduce over time in line with changes in replacement ratios, expected mortality and retirement, with the outstanding claim projection equivalent to 15 years of the 2020 payments (for known claims). The step change from actual payments to future payments relates to claims that are no longer expected to receive any IS benefits (mostly claims that have now reached retirement age) and the application of the 80% step-down in future payment estimates.

9.4.4 Care and Other Costs

Figure 9.5 shows historic and projected care and other payments for Severe Traumatic Injury claims (including IBNR claims).

Figure 9.5 – Other (incl. Care) Payments: Severe Traumatic Injury Claims ($Dec19)

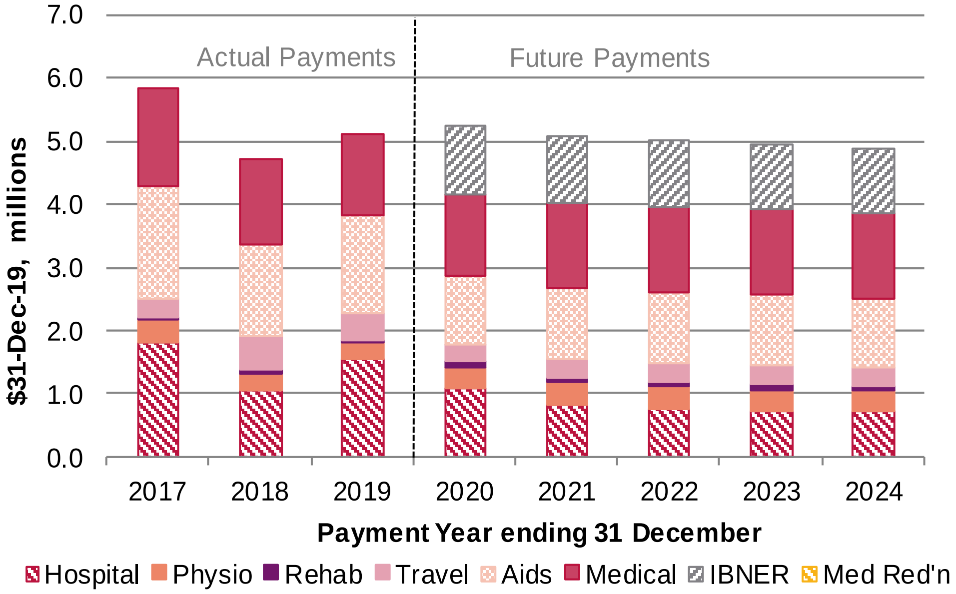


We expect $8.2 million of other and care payments in 2020, which is similar to payments in the last year; we note that a single recent high care claim from the 2019 accident year is expected to have care costs of just under $0.9 million per annum that explains most of this increase. Payments then increase in the short term due to allowance for new Severe Traumatic (IBNR) claims and our IBNER allowance which is intended to capture an annualised contribution for other benefits (primarily modifications and transfers from initial hospital care into home care). These increases are slowly offset by reductions due to mortality, with the outstanding claims projection equivalent to 29 years of the 2020 payments, including the IBNER allowances.

9.4.5 Treatment and Related Costs

Figure 9.6 shows historic and projected treatment and related costs for Severe Traumatic Injury claims (including IBNR claims).

Figure 9.6 – Treatment and Related Payments: Severe Traumatic Injury Claims ($Dec19)

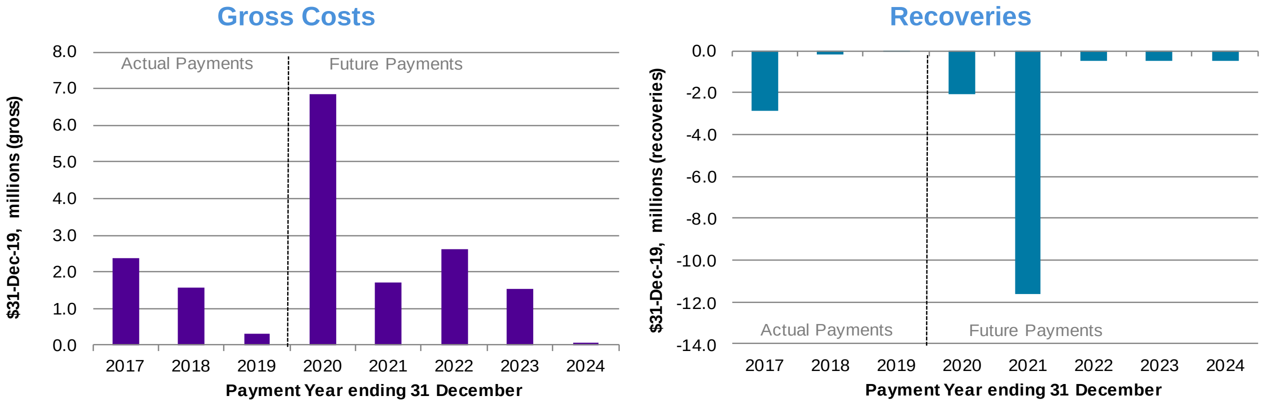


We expect future treatment and related payments of $5.2 million in 2020, similar to the average over the last three years. The outstanding claims projection is equivalent to 32 years of the 2020 payments.

9.4.6 All Other Payments

The following graph shows historic and projected other benefits for Severe Traumatic Injury claims – this includes one-off payments such as permanent impairment lump sums and recoveries, and smaller payments such as legal and investigation costs.

Figure 9.7 – All Other Payments: Severe Traumatic Injury claims ($Dec19)



In the three years to 31 December 2019, a net amount of $1.2 million of other benefits was paid for Severe Traumatic Injury claims. Our future projections for claims occurring prior to 31 December 2019 include (in current dollars):

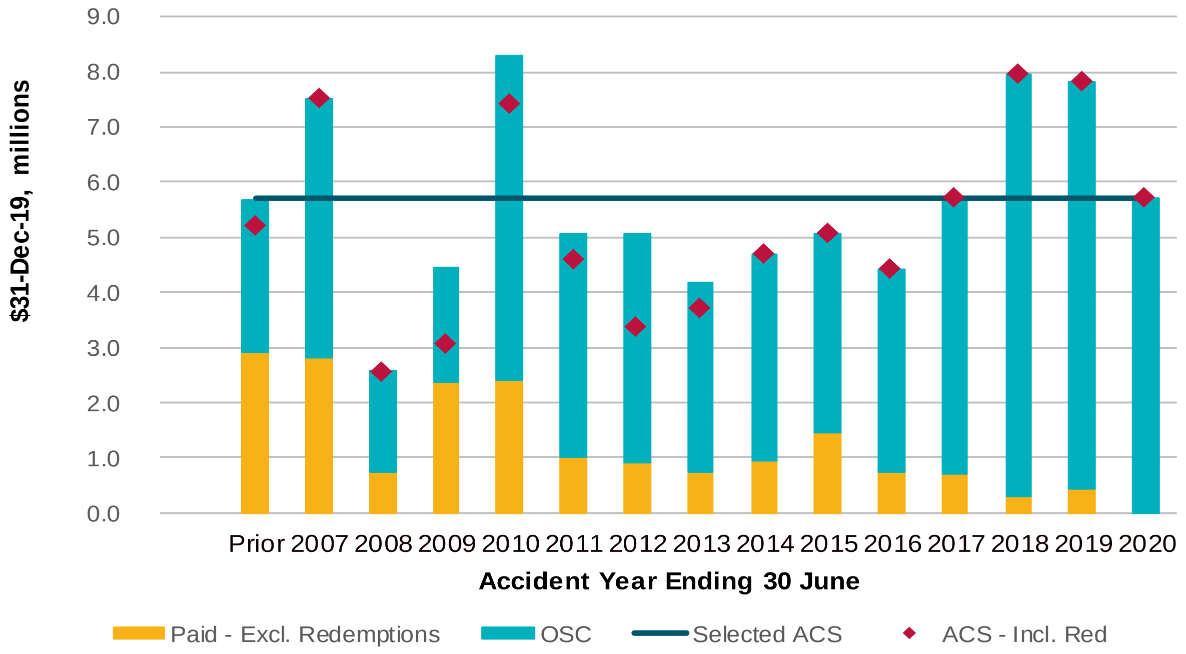
- Lump sum benefits of $12.0 million paid to Serious Injury claims who have not yet had a lump sum paid
- Legal and investigation costs of $1.6 million
- Recoveries of $15.6 million, for those claims where ReturnToWorkSA has identified recovery potential.

Due to the one-off nature of most of these payments, the outstanding liability is a much lower multiple of 2020 expenditure.

9.4.7 Overall Results and Implications

Figure 9.8 shows the net ultimate average claim size across current Severe Traumatic Injury claims. There is still a large share of the cost that is due to projected future payments, so there is greater uncertainty about ultimate costs than in other areas of the valuation.

Figure 9.8 – Average Claim Size: Reported Severe Traumatic Injury Claims ($Dec19)



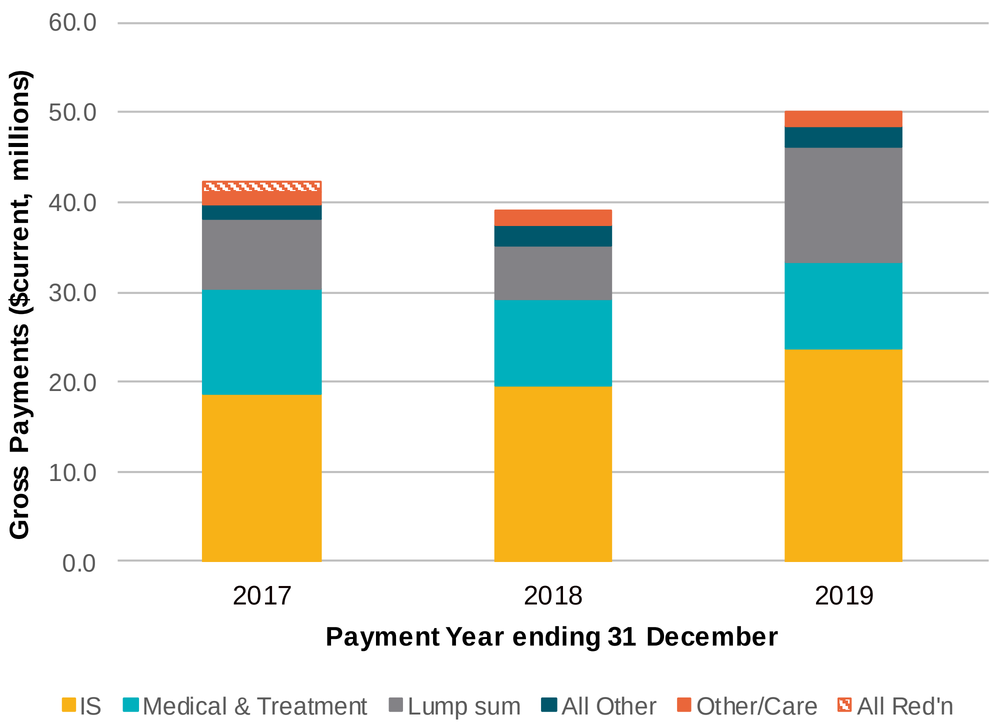
The average claim size across current Severe Traumatic Injury claims is around $5.0 million in current dollar values; however, this includes claims that have been redeemed at less than the full lifetime value. Excluding redeemed claims the average claim size is $5.5 million, which is similar to the projected average size ($5.7 million) for recent accident years where injuries are yet to stabilise. We project that the average size for the 2018 and 2019 accident years will end up higher than this in response to two (very) high needs claims.

9.5 Valuation of Other Serious Injury claims

9.5.1 Payments by Type

Figure 9.9 shows claim payments over the past three years for the Other Serious Injury claims (i.e. excluding the Severe Traumatic Injuries).

Figure 9.9 – Other Serious Injury Claim Payments ($Dec19)



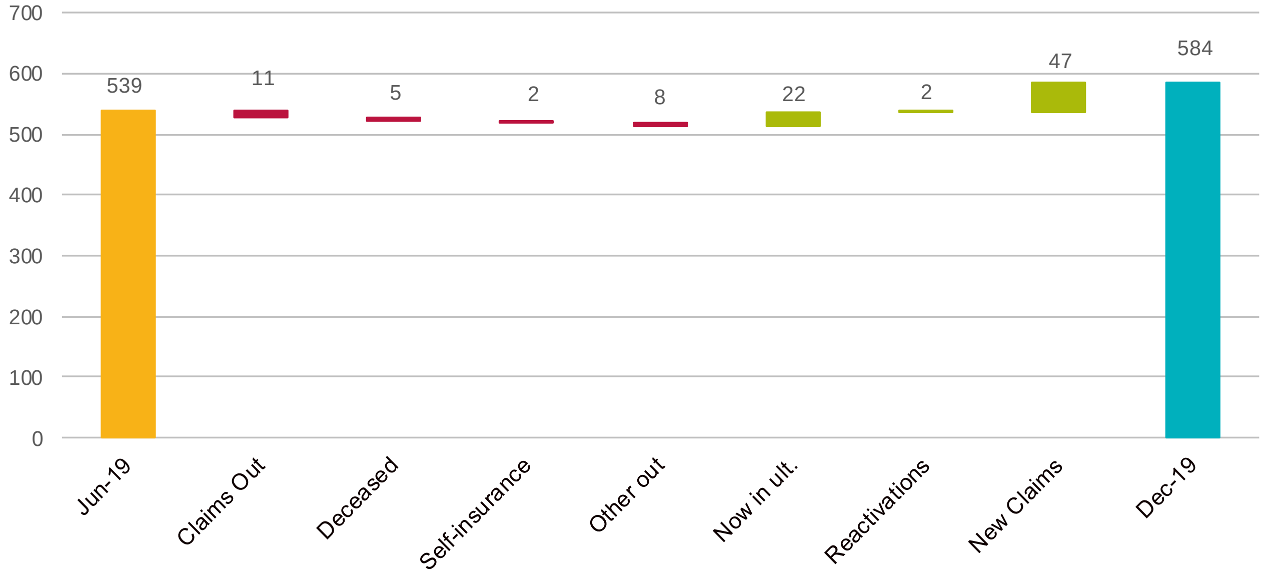
Around $131 million has been paid to Other Serious Injury claims in the last three years. After allowing for recoveries of around $5 million over this same period and removing redemptions, this equates to an average of around $42 million per annum in net claim payments (inflated to 31 December 2019 values), comprising:

- $21 million per annum in Income Support
- $12 million per annum in medical, treatment and related benefits
- $9 million per annum in lump sums
- Small amounts of other benefits ($2 million)
- $2 million per annum in recoveries.

9.5.2 Claimant Profile

Figure 9.10 shows the number of active Other Serious Injury claims (those being valued) at the current and previous valuation.

Figure 9.10 – Movement in Other Serious Injury Claim Numbers



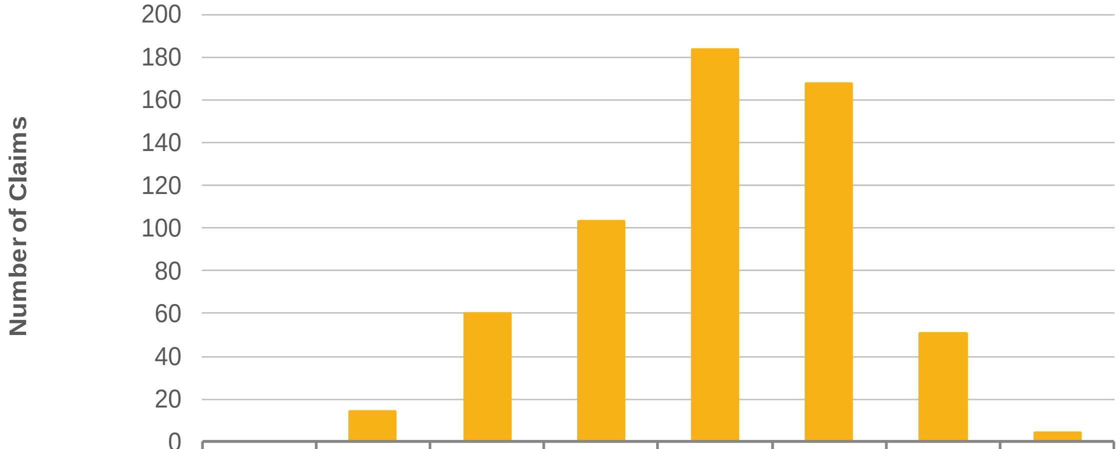
There are 584 active (i.e. with expected ongoing benefits) Other Serious Injury claims at December 2019, compared to 539 at the previous valuation. The major reasons for this change are:

- Claims Out – reduction of 11 claims. This largely refers to claims from the 'potential' cohort which were either confirmed not to meet the eligibility criteria for a Serious Injury claim, or where additional information has meant that their likelihood of becoming a Serious Injury claim has been revised.
- Deceased – reduction of five claims
- Self-insurance – reduction of two claims
- Other out – reduction of eight claims. This is largely due to claims being inactive for greater than 12 months and so do not meet our definition of 'ongoing'.
- Revised ultimate status – increase of 22 claims. This increase is due to claims that had previously been identified as a potential Serious Injury, but who were not considered as likely to meet the threshold at their latest review. Most of these claims are now included due to a formal determination based on their final WPI being higher than was estimated during the review.
- Reactivations – increase of two claims. This increase is due to claims that were previously included in the ultimate, but were not treated as 'ongoing', most likely due to them being inactive greater than 12 months. It is not unexpected that there will be some churn in the active status for claims in this cohort.
- New Claims – increase of 47 claims.

With the portfolio still maturing we would generally expect the number of Other Serious Injury claims to increase, broadly in line with the number of new claims each year, as discussed in Section 4.2.

Figure 9.11 shows the current age and life expectancy of the known and potential Other Serious Injury claims.

Figure 9.11 – Age Distribution and Life Expectancy (in years) for Other Serious Injury Claims



	<20	20s	30s	40s	50s	60s	70s	Older
Number of Claims	0	14	60	103	184	168	51	4
Life Expectancy	0	61	52	41	31	23	15	8

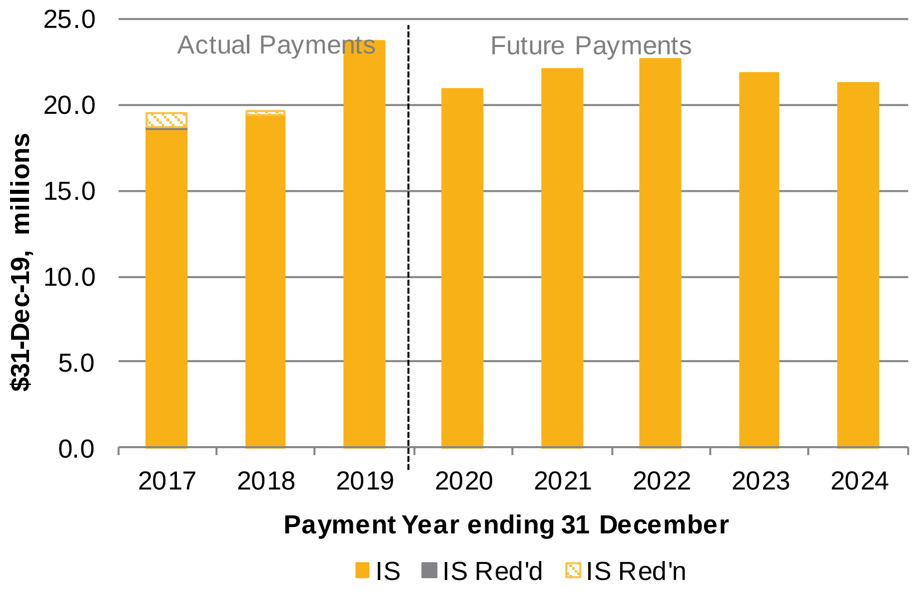
The Other Serious Injury claims are currently around 58 years old on average, with an expected future life expectancy of 29 years (after allowing for mortality, including mortality improvements). The average age at injury was 46 years.

Around 72% of the current Other Serious Injuries have had a WPI assessment, averaging around 36% WPI. At this valuation, there were 58 claims with recorded WPIs below 30%. The average impairment level excluding these low assessments is around 39%.

9.5.3 Income Support

Figure 9.12 shows historic and projected Income Support payments for Other Serious Injury claims (including IBNR claims). The grey bars indicate Income Support payments for claims who have since been redeemed.

Figure 9.12 – IS Payments: Other Serious Injury Claims ($Dec19)

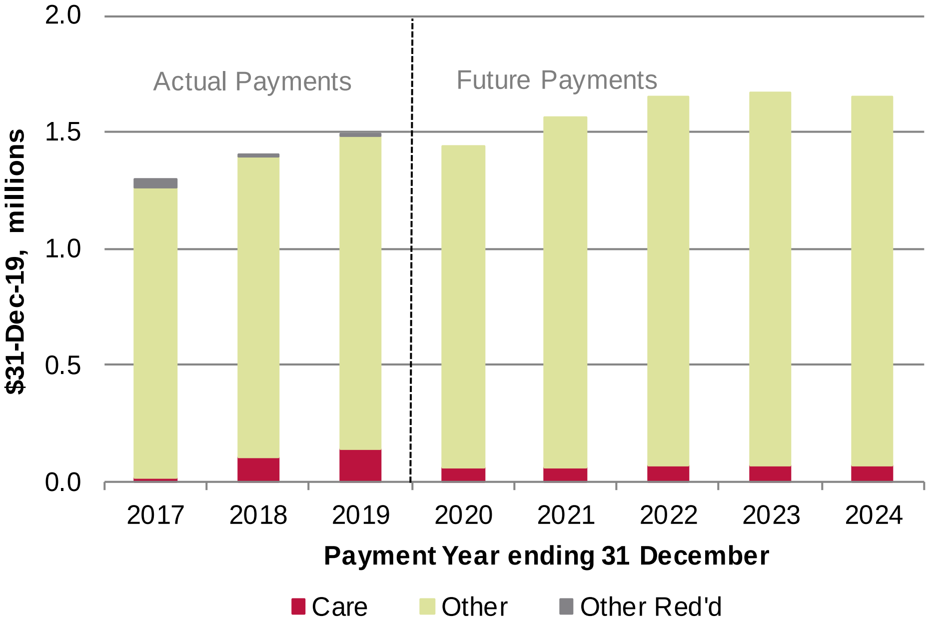


We estimate around $21 million will be paid in Income Support to Other Serious Injury claims in 2020. Future payments will generally reduce over time in line with expected mortality and retirement, although there is an increase between 2020 and 2022 as IBNR claims are identified. We note that the high level of Income Support payments in 2019 relates to backpay.

9.5.4 Care and Other Costs

Figure 9.13 shows historic and projected care and other payments for Other Serious Injury claims (including IBNR claims). The grey bars indicate Care and Other payments for claims who have since been redeemed.

Figure 9.13 – Other (incl. Care) Payments: Other Serious Injury Claims ($Dec19)

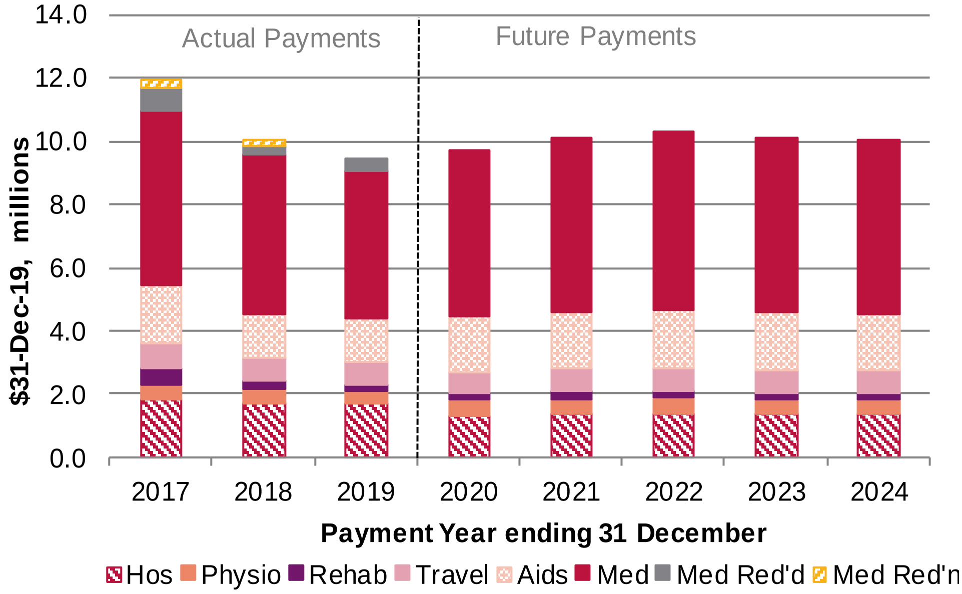


Other Serious Injury claims receive very little in care costs. We expect around $1.5 million in other payments in 2020.

9.5.5 Treatment and Related Costs

Figure 9.14 shows historic and projected treatment and related costs for Other Serious Injury claims (including IBNR claims). The grey bars indicate Medical and Treatment payments for claims who have since been redeemed.

Figure 9.14 – Treatment and Related Payments: Other Serious Injury Claims ($Dec19)

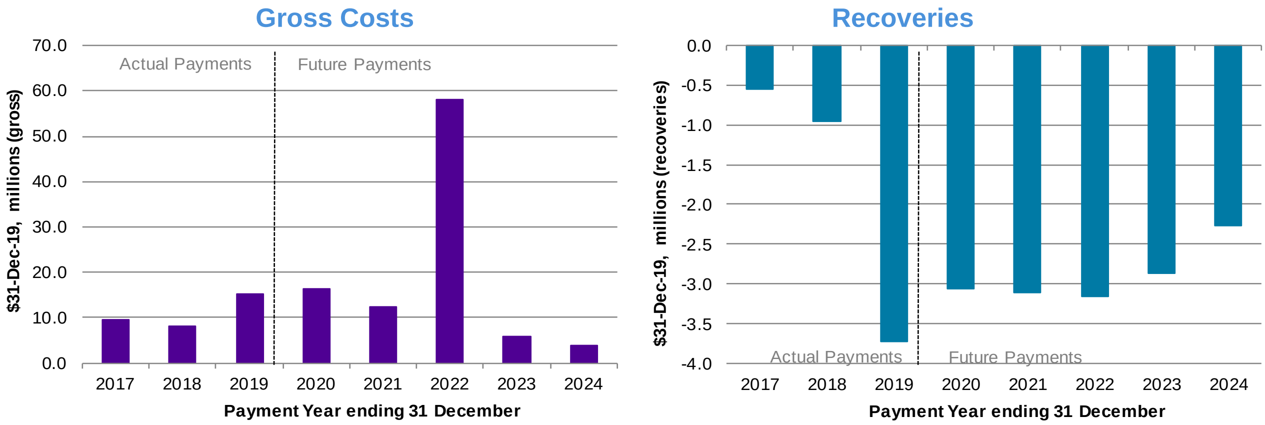


We expect treatment and related payments of $9.7 million in 2020 for ongoing claims, after lower costs in 2019. Payments increase in 2021 due to IBNR claims offset by reductions in line with mortality.

9.5.6 All Other Payments

Figure 9.15 shows historic and projected other benefits for Other Serious Injury claims (including IBNR claims).

Figure 9.15 – All Other Payments: Other Serious Injury claims ($Dec19)



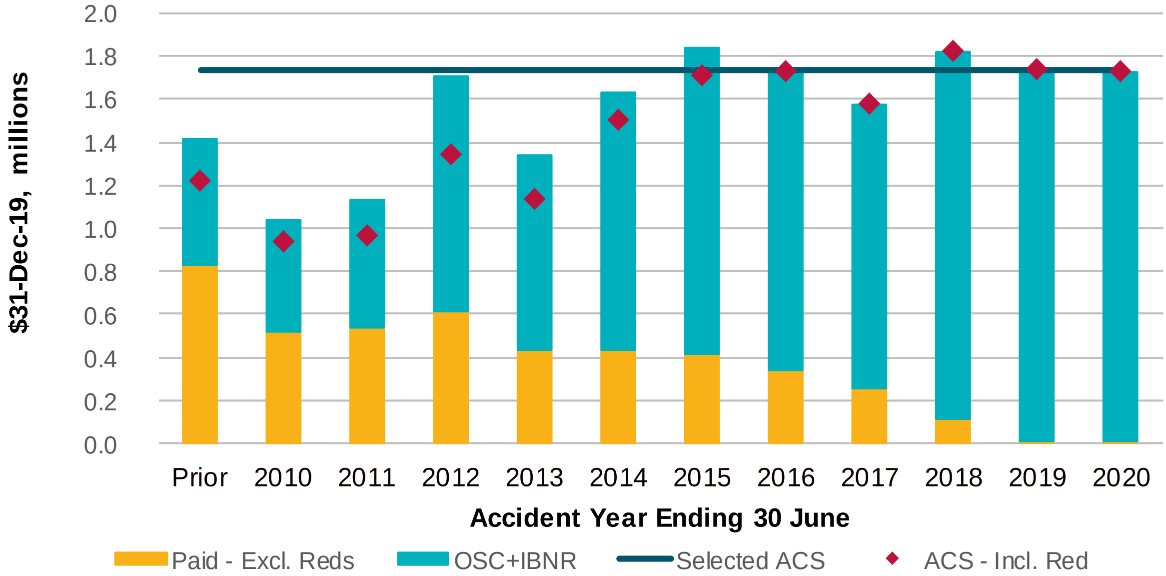
Our future projections include (in current dollars):

- Lump sum benefits of $82.3 million paid to current Other Serious Injury claims who have not yet had a lump sum paid. Lump sum payments on IBNR claims are pragmatically all assumed to be paid 3 years from the valuation date, leading to the spike in payments in 2022.
- Legal and investigation costs of $24.0 million
- Recoveries of $18.1 million.

9.5.7 Overall Results and Implications

Figure 9.16 shows the net ultimate average claim size (inflated to 31 December 2019 values) across all Other Serious Injury claims.

Figure 9.16 – Average Size by Payment Type: Other Serious Injury Claims



The total selected average size is around $1.7 million. Pre-2015 accident years have a lower size due to redemptions on claims for less than lifetime cost. Additionally, the identification of Serious Injury claims for these periods was made difficult due to inconsistent recording of WPI information, meaning it is possible there is some bias towards lower severity claims for these periods. More detail on the selections underlying this average size can be found in Appendix A.6.4.

9.6 Valuation Results and Actuarial Release

Table 9.3 shows the actuarial release by accident period for Serious Injury claims.

Table 9.3 – Actuarial Release: Serious Injuries

Accident Period	Projected Liab at Dec-19 from Jun-19 Valuation	Dec-19 Estimate on Jun-19 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 months to Dec-19	Actuarial Release²	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	267.8	270.3	2.5	-0.5	-1.9	-1%
2005/06 - 2012/13	604.5	595.0	-9.5	-7.6	17.1	3%
2013/14 - 2014/15	247.8	254.6	6.9	-2.4	-4.5	-2%
2015/16 - 2019/20¹	757.4	754.5	-2.8	5.6	-2.8	0%
Total	1,877.5	1,874.4	-3.0	-4.9	8.0	0%

[1] Accidents to Dec 19
² Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

The main reasons for the movements by accident period are as follows:

- Pre-2014 accident periods movements were largely due to further recognition of lower medical and treatment spend in these periods

- 2013/14 and 2014/15 accident periods increased due to some claims now using their own payment experience, which was materially higher than our aggregate selections that they were relying on at the previous valuation
- 2015/16 to 2019/20 accident periods were largely neutral overall, although there were some offsetting pluses and minuses beneath this result.

Table 9.4 shows the drivers of the actuarial release for Serious Injury claims.

Table 9.4 – Components of Actuarial Release: Serious Injury Claims

	Other Serious Injury	Severe Traumatic Injury	Total
	$m	$m	$m
AvE payments in six months			5
Changes to Valuation Basis			
AvE IBNR Transition Claims	9	(3)	6
AvE IBNR RTW Act Claims	(4)	15	11
High Care Claim Update	0	(7)	(7)
Updated Mortality	(3)	(4)	(7)
Other Changes	(5)	5	(0)
Subtotal	(3)	6	3
Total			8

The main drivers of the movement were:

- Changes in net claim numbers (including IBNR assumptions) resulted in a release of $17 million. This was largely due to EnABLE claims, where fewer claims than expected claims were identified over the six months and the claims that were identified had a lower than expected average size.
- Updated estimates for one very high care claim increased the liability by $7 million.
- Updating life tables resulted in an increase in the liability of $7 million, implying that mortality has improved at a faster rate than we had allowed for in our valuation over the past few years.
- Other movements were overall neutral although there were some offsetting movements including:
  - Releases on the Severe Traumatic Injury medical and treatment IBNER loading in recognition of continued lower spend in these areas on this cohort as well as the transfer of some of these costs into care (care estimates are already reflective of this).
  - Some increases on Other Serious Injury claims transitioning from using an aggregate selection to a selection based on their own payment history.

10 Economic and Other Assumptions

10.1 Discount Rate

The discounted mean term (DMT) of the liabilities is 15 years, similar to the previous valuation. The high DMT is driven by the large proportion of the OSC made up of Serious Injury liabilities. As a result, even relatively small changes to economic assumptions can have a material impact on the liability.

10.1.1 Approach

Accounting standard AASB 1023 states that the discount rates used in measuring the present value of expected future claim payments shall be: "risk free discount rates that are based on current observable, objective rates that relate to the nature, structure and term of the future obligations". It also says that:

> *"the discount rates are not intended to reflect risks inherent in the liability cash flows"*, and
>
> "*typically, government bond rates may be appropriate discount rates for the purpose of this Standard, or they may be an appropriate starting point in determining such discount rates"*.

We derive forward interest rates applying to each future duration by:

- Taking the quoted market yields on Australian Government coupon bonds for the durations they are available, as at the date of the valuation – this information is sourced from the Reserve Bank website. These market yields are used to determine the zero coupon yields.
- Using these zero coupon yields to determine forward rates
- At longer durations we extrapolate the forward yield curve between current market rates and our expected long term forward rate. The assumed long term forward rate and extrapolation take account of:
  - The duration that government bonds are available to, and the volumes of longer term bonds traded
  - Long term risk free rates of return
  - General economic factors
  - Current monetary policy (e.g. CPI currently in the range of 2% to 3%), combined with expectations of long term real yields
- Beyond the end of our extrapolation, the yield is maintained at the long term forward rate.

The resulting forward rates are applied to the projected cash flows for each future period. When discounting using forward rates, the relevant rates must be 'chained' together, for example a payment at the end of year three is discounted using the product of the first, second and third year forward rates.

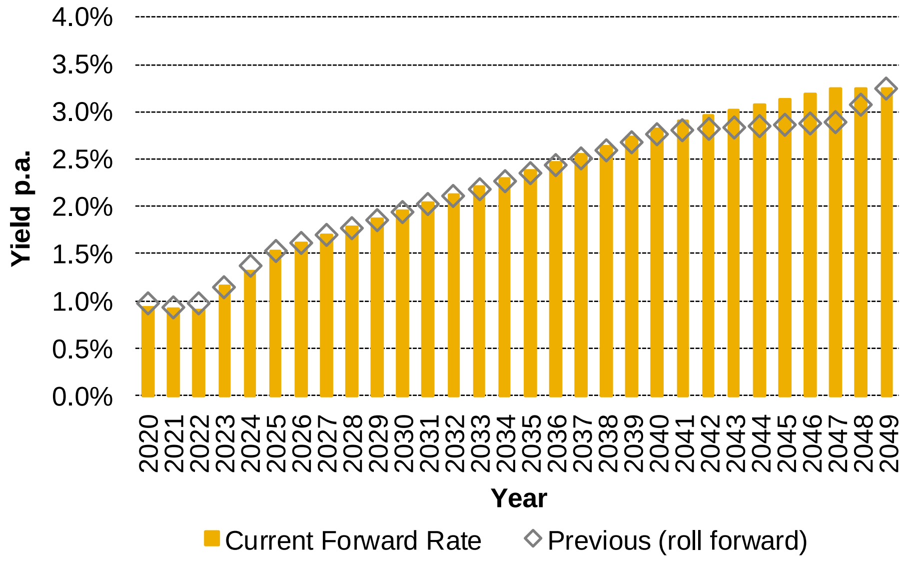
10.1.2 Current Assumptions

Discount rates at December 2019 are at similar level to June 2019 until around 2040, as shown in 31 December 2019.

Figure 10.1. Between 2042 and 2048, discount rates are higher than at June 2019, in line with the yields on available bonds. We have assumed a long-term rate of 3.25%, unchanged from our previous valuation, based on the yield of the longest date bond (March 2047).

The equivalent single discount rate has increased from 2.1% p.a. at 30 June 2019 to 2.2% p.a. at 31 December 2019.

Figure 10.1 – Risk Free Forward Rate vs Previous Valuation



Details of the discount rates by year are included in Appendix C.

10.2 Inflation

In setting our inflation assumptions we consider:

- Forecasts of CPI and wage inflation
- RBA monetary policy
- Market-based information on inflation, with the aim of obtaining inflation expectations which are consistent with the discount rate expectations (as the discount rates are market based), for example using Treasury Indexed Bonds (TIBs). TIBs are essentially Government bonds where the original capital invested, and subsequent coupon payments, are indexed for CPI inflation. The difference between yields on TIBs and on nominal government bonds gives an implied breakeven rate of CPI inflation.

Given there is a prescribed inflation index for income support payments that is specific to South Australian conditions, our inflation assumptions consider inflation at a SA specific level for this portfolio.

In summary, our assumptions at the current valuation are:

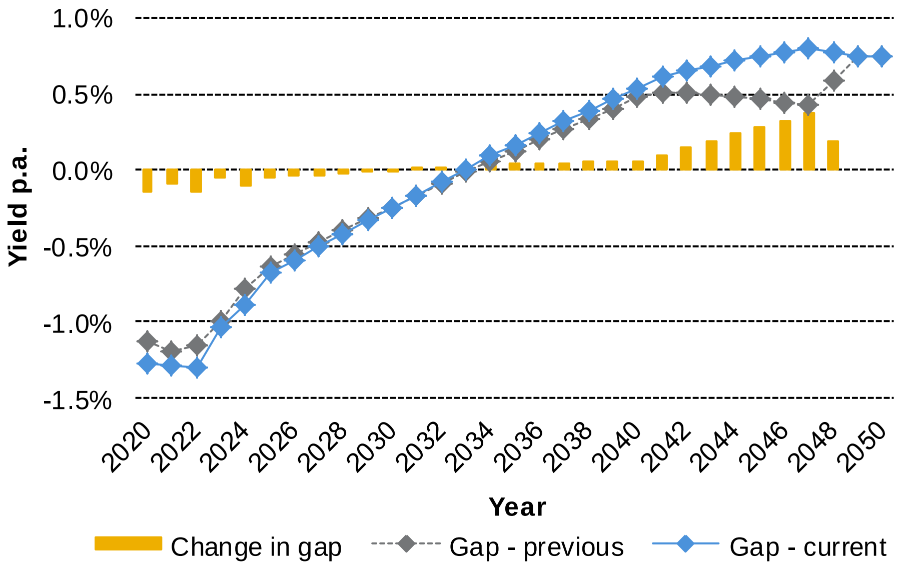
- Wage Price Inflation has been assumed to be 2.2% for the coming year. This is a reflection of both current forecasts and wage growth in SA over the past 12 months.
- Wage Price Inflation assumptions remains at 2.2% for the next 15 years, after which it gradually increases to an assumed 2.5% from 2049 and onwards. This long-term assumption represents a 0.75% p.a. gap between Wage Price Inflation and forward discount rates, unchanged from our June 2019 valuation.

- Average Weekly Earnings (AWE) is set as equal to Wage Price Inflation for the coming year. From 2024 onwards, AWE is set to 0.10% above Wage Price Inflation. This is in line with our assumption at the previous valuation, and reflects the low AWE growth in SA in recent years.
- CPI inflation has been set at 2.0% p.a. for all future durations. This is at the lower end of the Reserve Bank's targeted range of 2-3% p.a., and reflects the low CPI growth across both SA and Australia over recent periods.

Overall, our resulting projected wage inflation is slightly higher than our assumptions at the previous valuation in the short- to medium-term. In the long-term, our wage inflation assumptions are unchanged.

The combined impact of the above movements in adopted inflation and discount rates is a close to neutral movement in the 'gap' between inflation and discount rates, as shown in Figure 10.2. As this shows, the current economic assumptions imply a negative gap out to nearly 15 years.

Figure 10.2 – Gap between Adopted AWE and Discount Rates



The impact of this change is to decrease the scheme liability, which is quantified in Section 11.3.2.

The rates of inflation are applied to entitlement types as follows:

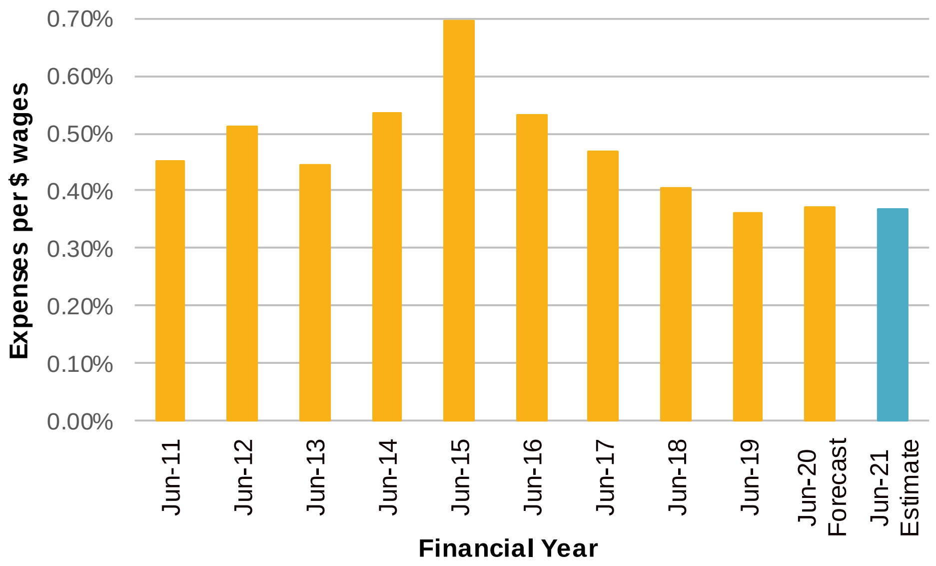
- IS entitlements and related expenditure for Short Term claims have no inflation applied for the current cohort of claims, consistent with the RTW Act. AWE is initially applied for future injuries.
- IS entitlements and related expenditure for Serious Injury claims are inflated using the projected Wage Price Inflation rate until retirement.
- The maximum Lump Sum entitlement is indexed annually by the adopted CPI rate (the maximum entitlement applies to all accidents occurring in a year).
- All other entitlements are inflated at the adopted AWE rate, with allowance for superimposed inflation where warranted.

We have made assumptions about superimposed inflation for some payment types, and on the timing of the application of inflation. These assumptions are detailed in Appendix C.

10.3 Expenses

In setting provisions for outstanding claims, it is necessary under accounting and actuarial standards to include an allowance for the future costs of claim administration that are not allocated to individual claims. Figure 10.3 below shows expenses as a percentage of wages over the past 10 years along with the forecast figure for 2019/20 and the 2020/21 estimate.

Figure 10.3 – Scheme Expense Rate (% of covered wages)



Following the passage of the RTW Act, there was a period of high expenses driven by transitional costs in the scheme. The expenses have since reduced each year since 2015, and are now forecast to be 0.37% of wages for the June 2020 financial year, which is below the anticipated long term expense rate from the reform costing work (0.40%).

The approach we have taken to set our expense allowance for the outstanding claims valuation is as follows:

- For Serious Injury claims the allowance is 8.5% of outstanding claims, unchanged from the previous valuation.
- For Short Term claims the allowance is 12.5% of outstanding claims, unchanged from the previous valuation.

Given the significant changes that have been undertaken by ReturnToWorkSA to implement the RTW Act, and the resulting changes in claimant profile over recent years, the expense loading may need some minor revision once a new steady state is reached.

The overall expense rate equates to 9.6% of gross outstanding claims, unchanged from the previous valuation.

10.4 GST Recoveries

Entitlements are modelled net of GST (ITC) recoveries.

10.5 Risk Margins

Since June 2017 ReturnToWorkSA has established its outstanding claims provision with a 75% probability of sufficiency.

We have only undertaken a high-level review of the risk margin scorecards for internal and external systemic risks at this valuation, given a more comprehensive review was done at the previous valuation. Our approach is based on the key elements of the framework proposed by the Institute of Actuaries of Australia's Risk Margin Taskforce in their paper "Framework for Assessing Risk Margins" ('the task force paper'). Specifically, we have examined Coefficients of Variation (CVs) arising from internal systemic error and external systemic error. A summary of the framework is included in Appendix C.2.

We have split the various entitlements into six groups for the purposes of risk margins analysis. For each risk margins group, we derive assumptions about the independent error, internal systemic error and external systemic error, which are then combined to estimate the total CV for that risk margin group. We assume that there is some correlation between risk margins group within internal and external systemic error, while we assume that independent error is (by definition) uncorrelated. This leads to a 'diversification benefit' in the overall Scheme risk margin.

Our current estimated CVs for each entitlement group, along with the total diversified and undiversified CV, are set out in Table 10.1 below.

Table 10.1 – Coefficient of Variation

	Total CV	
Risk Margin Group	Dec-19	Jun-19
Serious Injury	27.9%	27.9%
Short Term Claims		
Income Support	15.7%	15.7%
Lump Sums	25.1%	25.1%
Legal + Investigation	28.0%	28.0%
Medical and Other Treatment	17.1%	17.1%
Recoveries	20.0%	20.0%
Total (Undiversified)	26.1%	26.2%
Total (Diversified)	**22.1%**	**22.3%**
Diversification	15.2%	15.0%

Our selected CVs are unchanged from our previous risk margin review and reflect a relatively high level of uncertainty currently in the scheme.

Based on a diversified coefficient of variation of 22.1% and our modelled distribution (which is a blend between a normal and lognormal distribution), we recommend a risk margin of 14.0% at a 75% probability of sufficiency, unchanged from our previous valuation.

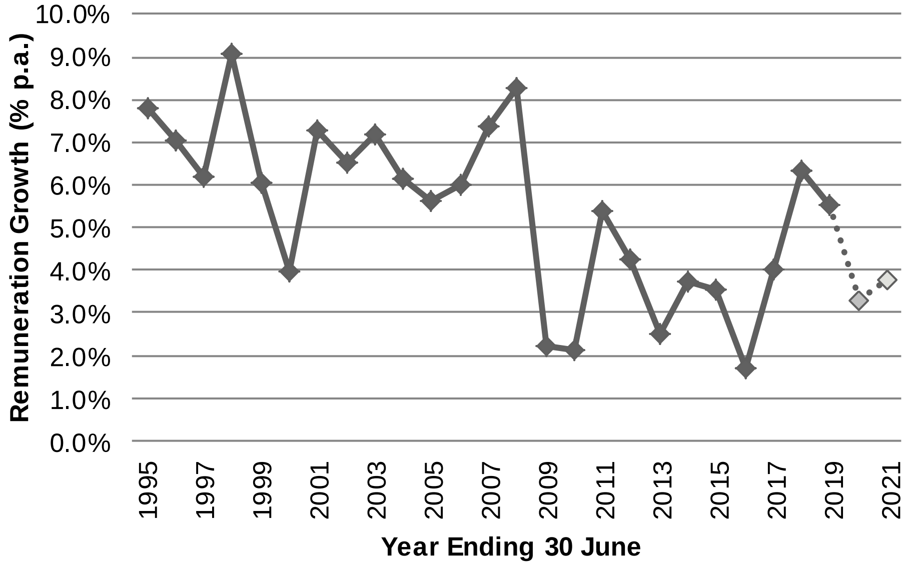
10.6 Non-Exempt Remuneration

When making our assessment of the cost of future claims, we consider the underlying remuneration pool as a measure of the exposure from which claims will arise.

The movement in the remuneration pool over time is the net result of a number of influences: (1) growth in average weekly earnings, (2) 'natural' growth in the number of employees, and (3) movements of firms out of/into the scheme due to becoming self-insured or exiting self-insurance.

The remuneration projection for current and future years is undertaken by ReturnToWorkSA. The implied annual growth in the total non-exempt remuneration by year is shown below in Figure 10.4.

Figure 10.4 – Non-Exempt Leviable Remuneration: Annual Growth



We have adopted ReturnToWorkSA's remuneration projection of $30.6 billion for 2019/20, noting that it is still subject to estimation. The key features we note in the remuneration experience are:

- The remuneration growth for 2009 and 2010 was the lowest seen since the early 1990's (the time of the last significant recession in Australia). There were two key contributors to this experience:
  - The global financial crisis (GFC) – during 2009 unemployment rates were higher than for the previous few years, and the level of under-employment (people working fewer hours than they would like) also rose. The level of wage inflation also reduced in the year.
  - A change in the definition of leviable remuneration from 1 July 2008, to exclude wages for trainees and apprentices (noting that while their wages are excluded, their claims costs are not). This change to the remuneration base reduced remuneration estimates for 2008/09 by about 2% relative to the previous definition.
- Despite remuneration growth briefly heading up to more 'normal' historical levels in 2011 and 2012, wage growth then reduced again towards levels seen during the GFC, and then stayed low until 2017.
- Actual 2019 remuneration growth ended up at 5.5%, following on from 6.0% growth in 2018. Both of these years had higher growth than any other year all the way back to 2008.
- ReturnToWorkSA's projection of growth for 2020 is 3.3% (reduced from previous projection of 3.8%), which is below average growth compared to the past decade. The current projection for 2021 and beyond is for wages growth of 3.8% (down 0.2% from previous projection of 4.0%), which reflects the generally soft economic conditions currently being experienced.

11 Valuation Results

This section of the report summarises the valuation results, namely:

- The central estimate of outstanding claims as at 31 December 2019
- Our recommended balance sheet provision under AASB1023
- Movement in the central estimate compared to what was projected at the previous valuation
- Estimated historical scheme costs
- Projected future cash flows for the current outstanding claims
- Projected outstanding claims as at 30 June 2020 and 31 December 2020
- Reconciliation of results with 30 June 2019 projections.

11.1 Outstanding Claims – Central Estimate

Our central estimate of the outstanding claims by entitlement type as at 31 December 2019 is set out in Table 11.1. This liability relates to all claims which occurred on or before 31 December 2019 and includes the impact of updated economic assumptions.

Table 11.1 – Outstanding Claims by Entitlement Type

Entitlement Group	Short Term Claims	Serious Injuries	Total	% of Net Cent Est
	$m	$m	$m	
Income	170	455	625	22%
Medical	134	615	749	26%
Other (incl. Care)	8	475	483	17%
Lump sums	295	94	390	14%
Hospital	20	119	140	5%
Travel & Accomodation	6	58	63	2%
Worker legal	43	12	56	2%
Corporation legal	36	12	49	2%
Physical Therapy	8	41	49	2%
Rehabilitation	16	20	36	1%
Investigation	2	1	3	0.1%
Common law	3	0	3	0.1%
Commutation	2	0	2	0.1%
LOEC	1	0	1	0.0%
Redemptions	0	0	0	0%
Gross Liability	745	1,904	2,649	93%
Recoveries	-32	-34	-65	-2%
Expenses	93	162	255	9%
Net Central Estimate	807	2,032	2,839	100%

The outstanding claims liability before recoveries and expenses is estimated to be $2,649 million. The net central estimate, allowing for recoveries and including an allowance for claims handling expenses, is $2,839 million.

Table 11.2 details the outstanding claims result by accident year.

Table 11.2 – Outstanding Claims by Accident Year

Accident Year	Short Term Claims	Serious Injuries	Total	% of Net Cent Est
	$m	$m	$m	
Pre Jun-06 Years	27	311	338	12%
Jun-07	5	77	82	3%
Jun-08	5	51	56	2%
Jun-09	6	60	67	2%
Jun-10	7	80	86	3%
Jun-11	8	84	92	3%
Jun-12	9	90	99	3%
Jun-13	11	116	127	4%
Jun-14	13	114	127	4%
Jun-15	20	152	172	6%
Jun-16	46	127	173	6%
Jun-17	69	165	234	8%
Jun-18	119	164	283	10%
Jun-19	224	215	439	15%
Dec-19	175	99	274	10%
Gross Liability	745	1,904	2,649	93%
Recoveries	-32	-34	-65	-2%
Expenses	93	162	255	9%
Net Central Estimate	807	2,032	2,839	100%

Table 11.3 shows the overall liability split between Serious Injuries and Short Term claims, both before and after discounting. As this shows, there is a significant level of discounting in relation to the Serious Injury claims liability due to its long payment pattern.

Table 11.3 – Impact of Discounting

	Short Term Claims	Serious Injuries	Total
	$m	$m	$m
Inflated	836	3,468	4,304
Inflated and Discounted	807	2,032	2,839
Ratio	96%	59%	66%

11.2 Provision for Outstanding Claims

Table 11.4 sets out the components of our recommended provision at 75% probability of sufficiency, $3,237 million.

Table 11.4 – Recommended Balance Sheet Provision

	Central Estimate	Risk Margin	Recommended Provision
	$m	$m	$m
Gross Claims Cost - Serious Injuries	1,904		
Gross Claims Cost - Short Term Claims	745		
Claims Handling Expenses	255		
Gross Outstanding Claims Liability	2,904	407	3,311
Recoveries	-65	-9	-74
Net Outstanding Claims Liability	2,839	397	3,237

11.3 Movement in Liability

Our net central estimate including CHE is $40 million higher than projected at the previous valuation, as shown in Table 11.5.

Table 11.5 – Movement from Previous Valuation

	Gross	Recoveries	CHE	Net
	$m	$m	$m	$m
Liability as at Jun-19	2,535	-56	243	2,722
Plus liability for claims incurred in the period	273	-6	30	297
Less Expected Payments to Dec-19	214	-4	25	235
Plus Interest (unwinding of discount)	14	0	1	15
Liability Projected from Previous Valuation	2,607	-58	250	2,799
Current Valuation	2,649	-65	255	2,839
Difference	42	-8	5	40

We have attributed the change in central estimate into the following components:

- Movement in liability due to claims experience – this covers the components that are due to claim outcomes (such as changes in the number and mix of claims), as well as the impact of revisions to our valuation assumptions.
- Impact of changes in economic assumptions – the component which is mandated by accounting standards (and therefore outside ReturnToWorkSA's control).

This split also allows calculation of the actuarial release, where we add the difference between actual and expected payments to the movement in the liability due to claims experience, to give a measure of the 'profit' impact of claims management performance relative to the previous valuation basis.

Table 11.6 – Movement in Central Estimate and Determination of Actuarial Release

	Liability Estimate[1]	AvE Payments in 6 mths to Dec-19	Actuarial Release/ (Strengthening) [2]
	$m	$m	$m
Liability at Jun-19 Valuation	2,722		
Projected Liability at Dec-19 (from Jun-19 valuation)	2,799		
Claims Movement - Short Term Claims	47	19	-65
Claims Movement - Serious Injury	-3	-5	8
Impact of Change in economic assumptions	-4		
Recommended Liability at Dec-19	2,839		
Total Actuarial Strengthening			-57

[1] Net central estimate of outstanding claims liability, including CHE

[2] Includes change in OSC and Act vs Exp payments.

Each of these components is discussed in the following sections.

11.3.1 Actuarial Release at December 2019

The actuarial strengthening (negative release) over the period is $57 million. Table 11.7 shows the actuarial strengthening by entitlement type.

Table 11.7 – Actuarial Strengthening by Entitlement Type

Entitlement Group	Short Term Claims[1]	Serious Injury Claims[1]	Total Actuarial Release [1]	Release %
	$m	$m	$m	
Income Support	-36.7	0.8	-35.9	-6.1%
Lump Sums	-6.1	0.7	-5.5	-1.4%
Worker legal	-3.3	-0.5	-3.9	-7.2%
Corporation legal	-3.4	0.1	-3.3	-7.1%
Investigation	0.1	0.3	0.5	13.3%
Medical	-14.4	14.5	0.1	0.0%
Other	-0.1	-19.5	-19.6	-4.3%
Hospital	1.0	7.7	8.7	6.1%
Travel	-0.7	1.9	1.2	1.9%
Physical therapy	-0.6	-3.4	-3.9	-9.0%
Rehabilitation	-3.2	2.5	-0.7	-2.1%
Common Law	0.2	0.0	0.2	7.1%
LOEC	-0.4	0.0	-0.4	-68.7%
Commutation	0.2	0.0	0.2	11.3%
Gross Liability	-67.2	4.9	-62.3	-2.5%
Recoveries	7.5	3.1	10.6	-19.0%
Expenses	-5.8	0.1	-5.7	-2.3%
Net Central Estimate	-65.4	8.1	-57.4	-2.1%

[1] Includes change in OSC and Act vs Exp payments, excludes economic impacts

The major factors contributing to the $57.4 million actuarial strengthening at the current valuation are:

- For **Short Term claims**, the actuarial strengthening (negative release) of $65 million is the result of:
  - An increase of $37 million on Income Support claims. This is the combined impact of higher than expected payments of $13 million in the six months to December 2019 and our valuation response of $23 million. There has been an increase in the proportion of claims that get Income Support (more than two weeks off work) and more claims are continuing through to 6-24 months on benefits than in recent years. This is partly explained by changes in the mix of claims, with increases in the numbers of mental injury and musculoskeletal claims which tend to remain on Income Support longer than other types of claims, and partly by lengthening claim durations (slower RTW).
  - An increase of $14 million for Medical benefits due to a combination of the flow on to extra medical costs from the increases in Income Support claims, higher numbers of hearing loss claims requiring hearing aids and medical assessment, and high medico-legal costs due to high transitional WPI assessment and dispute activity.
  - An increase of $6 million on lump sum entitlements. This is the net impact of further increased hearing loss claims and First Paid lump sums, partly offset by a reduction in Death lump sums due to favourable experience.
  - An increase of $7 million for legal costs, as new disputes continue and more disputes move into the later (and more expensive) stages of the dispute resolution process.
  - An increase of $3 million for vocational Rehabilitation.
  - An $8 million saving on recoveries, where there has continued to be more favourable experience than the previous basis was projecting.

- For **Serious Injury claims**, there was an overall release of $8 million, due to:
  - The net movement in claim numbers (including IBNR assumptions) resulted in a release of $17 million, largely due to fewer than anticipated Severe Traumatic Injury claims emerging, and those that did emerge having a lower average size than expected.

    We caution that while the impact of the net claim number movement for Other Serious Injury claims was essentially neutral at this valuation, we are still only allowing for a very small percentage of older ongoing claims to ultimately reach the Serious Injury boundary (around 0.8% of 2016 and 2017 claims that are still open), and pressure remains on this part of the valuation.
  - Revised estimate information for one very high care claim from the 2019 accident year resulted in a strengthening of $7 million, concentrated in Other (where care costs are captured).
  - Using the latest ABS mortality rate table resulted in a strengthening of $7 million.
  - Other valuation changes were neutral overall, but there were some offsetting impacts behind this. There were releases on older accident periods, as we continue to recognise the reduced medical and treatment spend on this cohort, while some Other Serious Injury claims had larger increases as a result of us moving to relying on their own payment experience rather than aggregate selections.
  - Payments in the six months were $5 million lower than expected, which is mostly due to lump sum timing; holding this amount in the liability produces a close to neutral result for lump sums.

Our projections for the remaining entitlement types were also reviewed and updated, although none of the movements are significant in relation to the overall scheme liability.

11.3.2 Impact of Economic Assumption Changes

Changes to inflation and discount rate assumptions decreased the central estimate by $4 million.

As discussed in Section 10.1 there has been little movement in economic assumptions between June 2019 and December 2019, and thus the impact of economic assumption changes is relatively small.

11.4 Historical Scheme Costs

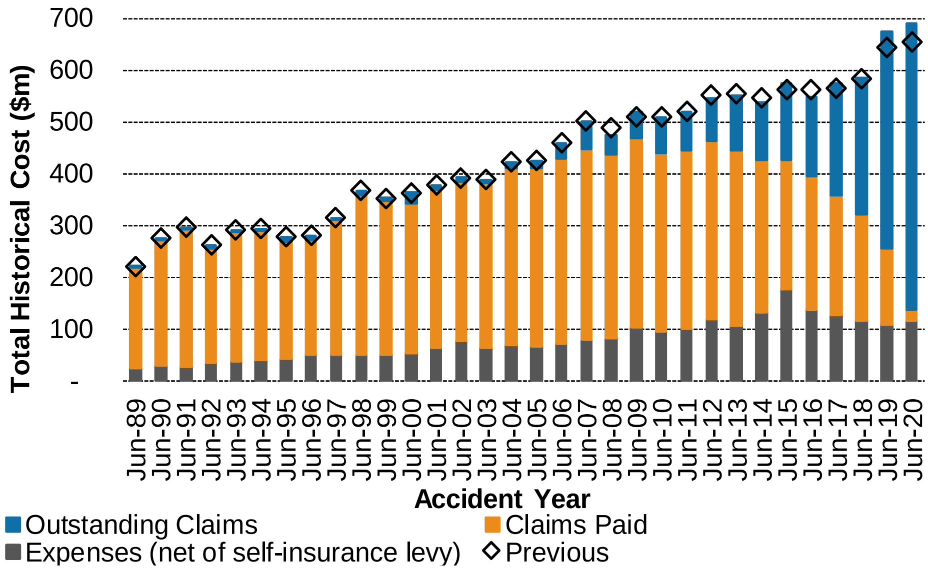
As part of our valuation we have estimated the 'historical cost' for each past accident year. This represents our estimate of total projected costs for the accident year, including expenses, and is discounted to the start of the accident year. Historical claims handling, operating expense and self-insurer levy figures are taken from ReturnToWorkSA's published annual accounts and the latest information from ReturnToWorkSA for 2020.

Figure 11.1 summarises the currently estimated historical costs for each year since the scheme began. As this shows, commencement of the RTW Act had initially acted to contain the cost for accident years up to 2017 at around $550 million, breaking the strong upward trend seen in the lead up to 2009. Scheme expenses were particularly high in 2015 as a result of additional transition related costs. In general the hindsight cost estimates are similar to the previous valuation estimates, other than for the latest two accident years.

For recent accident years the costs are projected to be higher than the pre-2017 level as a result of:

- Higher claim numbers, particularly for Income Support claims, as explained in Section 4.1.1
- Lower discount rates applying for the whole of the projection, as explained in Section 10.1
- The impact of higher active income support claim numbers, as explained in Section 5; this is particularly so for the 2018/19 and 2019/20 years
- For 2019 there was an unusually high number and cost of the most severely injured claims (claims in the Severe Traumatic Injury cohort). This dynamic makes the increase from 2018 to 2019 more pronounced than it would otherwise be and is not an indication of deterioration in experience; rather it is just a reflection of the volatile nature of severe traumatic claim numbers given the low volume.

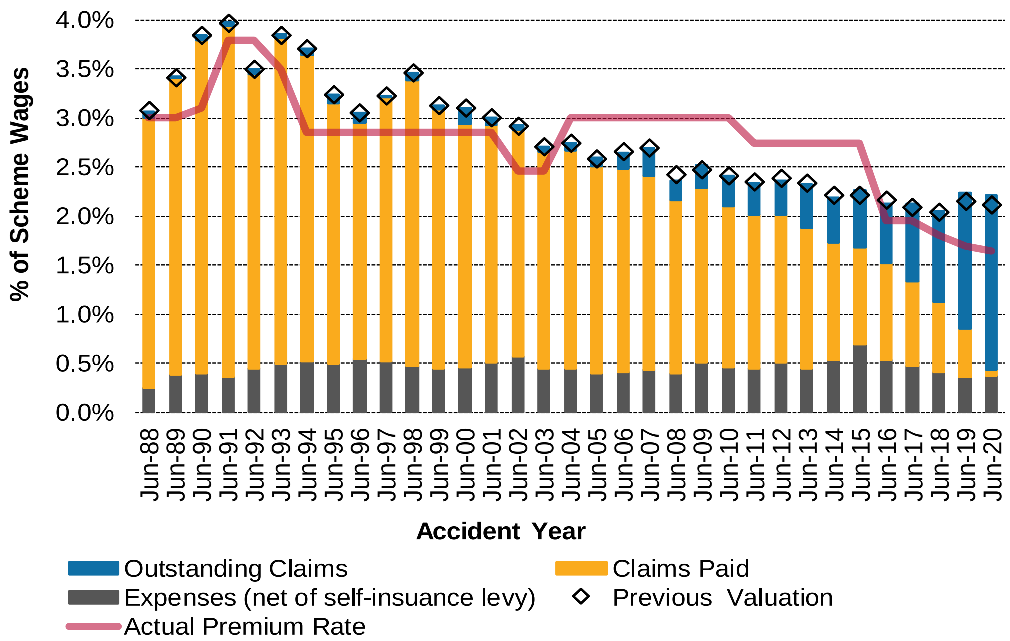
Figure 11.1 – Historical Cost Discounted to Accident Year



Using these costs we have estimated the 'historical premium rate', or the Break Even Premium (BEP) rate, for each past accident year; this is the amount that would have been sufficient to fully cover claim costs, including expenses and recoveries, assuming the scheme achieved risk free returns each year and the current actuarial valuation is an accurate forecast of future payments. The BEP is calculated by dividing the total projected costs for the accident year (from Figure 11.1) by the total scheme leviable remuneration in that year (discussed in Section 10.6). We present the costs on this basis, i.e. using risk free discount rates, so that a like with like comparison can be made over the history of the scheme, which allows current scheme performance to be assessed in a long term context.

Figure 11.2 summarises the estimated annual BEP since the scheme began, including a comparison with the estimates at our previous valuation and the scheme's actual average premium rate charged for each year.

Figure 11.2 – Break Even Premium Rate and Actual Premium Rate Charged



* The Break Even Premium Rate in this Figure is calculated using the risk free rate, so that a like with like comparison can be made over the history of the scheme. For clarity, this is not the same as the scheme's pricing basis as the scheme targets a higher than risk free rate of return when premiums are set.

The main points to note are:

- The introduction of the RTW Act reduced the BEP for accident years between 2008 and 2010 to just under 2.5% of wages
- For accident years between 2011 and 2018 the costs were progressively lower again, as claims had less opportunity to remain on long term benefits
- The BEP estimates for 2019 and 2020 are higher than the 2018 BEP, reversing the downward trend
- The current estimate of the BEP for the 2020 accident year is 2.22% of wages, up from 2.11% at the June 2019 valuation. The majority of this increase is attributable to changes in the underlying claims performance:
  - Short Term claim costs are projected to be 0.11% higher than at our previous valuation
  - Serious Injury costs and Scheme expenses both moved by less than 0.01% of wages and were offsetting (Serious Injury costs being marginally higher, and expenses lower).
- Scheme expenses have reduced year-on-year since 2015, when they were particularly high as a result of additional transition related costs. Expenses for the 2020 year are forecast to be 0.37% of wages, which is below the target post-reform rate of 0.40% of wages.

We note that these calculations assume past and future investment earnings at the risk free rate, and adopt the annual cost of expenses in the year. All else being equal, any earnings above the risk free rate or additional sources of income would act to reduce the required premium rate.

We emphasise that (as seen in the graph) the BEP estimates for recent accident years include a significant outstanding claims estimate and are therefore likely to change as experience emerges. We also note that the adopted wages figure for 2020 still involves a degree of estimation.

11.5 Future Cash Flows

Table 11.8 presents projected cash flows for the coming four half-years, by entitlement type. These cash flows include allowance for future claims incurred as described in Section 11.6, but make no allowance for expenses.

Table 11.8 – Projected Cash Flows

Entitlement Group	Projected Cashflows for Period			
	Dec-19 to Jun-20	Jun-20 to Dec-20	Dec-20 to Jun-21	Jun-21 to Dec-21
	$m	$m	$m	$m
Income Support	85.2	86.9	89.1	91.4
Medical	38.5	40.4	40.5	42.5
Lump sums	57.0	43.9	45.9	50.1
Rehabilitation	7.5	7.7	7.8	8.0
Physical Therapy	5.3	5.5	5.5	5.6
Hospital	9.9	10.3	10.3	10.7
Legal - Non-Contract	7.0	7.0	6.9	7.0
Other	7.6	7.7	8.9	9.0
Legal Contract	10.8	11.0	10.2	9.7
Travel	3.3	3.3	3.4	3.5
Investigation	1.1	1.1	1.1	1.1
Commutation	0.2	0.2	0.2	0.2
LOEC	0.1	0.1	0.1	0.1
Common law	0.2	0.2	0.2	0.2
Recoveries	-4.8	-7.0	-17.0	-5.3
Net Claims Cost - Total	228.7	218.3	213.2	233.7
Serious Injuries (net)	42.3	26.8	19.8	35.8
Short Term Claims (net)	186.4	191.4	193.4	197.9

Cash flows over the next two years are expected to remain fairly stable, with the next half-year slightly higher due to a higher number of lump sums expected over the next six months. The irregular shape to the Serious Injury cashflows is a result of assumptions around the timing of one-off lump sums and recoveries.

11.6 Projected Outstanding Claims

Table 11.9 shows the outstanding claims projected to 30 June 2020, 31 December 2020 and 30 June 2021. We note the payments shown here are based on those in Table 11.8, but also include an allowance for claims handling expenses for consistency with our liability estimate.

Table 11.9 – Projected Outstanding Claims Provision (30 June 2020, 31 December 2020 and 30 June 2021)

	Half year ending		
	Jun-20	Dec-20	Jun-21
	$m	$m	$m
Provision at Period Start	3,237	3,328	3,440
Less Risk Margin	397	409	422
Central Estimate at Period Start	2,839	2,920	3,017
Plus Additional Liability Incurred in Period	323	328	333
Less Expected Payments in Period	-256	-245	-241
Plus Interest (unwind of discount)	14	15	15
Projected Central Estimate at Period End	2,920	3,017	3,124
Plus Risk Margin	409	422	437
Projected Provision at Period End	3,328	3,440	3,561

We project the central estimate for the net outstanding claims liability at 30 June 2020 to be $2,920 million; this estimate includes allowance for claim payments and expenses, discount rate movements in line with forward rates and new claims incurred in the period 1 January 2020 to 30 June 2020. The corresponding provision at a 75% probability of sufficiency is $3,328 million.

The projected increase to 30 June 2020 in the liabilities relates to the fact that the additional liability incurred on new Serious Injury claims is more than the expected payments on existing Serious Injury claims; for Short Term claims the half-yearly ins and outs are now broadly offsetting.

11.7 Reconciliation of Incurred Cost with Previous Projection

At the 30 June 2019 valuation we projected an additional claim cost liability of $267 million would be incurred from claims arising in the June to December 2019 half-year. Our current projection for the ultimate value of this liability is $288 million, a material increase of 7.8% or $21 million consisting of:

- Deterioration in Short Term Claims adding $19 million, particularly as a result of higher Income Support claims and deteriorating RTW outcomes
- Serious injured claims adding $2 million.

Table 11.10 – Comparison of June 2019 Projections to Current Valuation

For period 1 Jul 2019 to 31 Dec 2019		
Incurred Claims Liability ($m, excl. expenses):		Difference
Projected in Jun-19 Valuation	267	
Incurred (current valuation)	288	7.8%

12 Uncertainty and Sensitivity Analysis

12.1 Risk and Uncertainty

In this section we discuss the major areas of uncertainty involved in estimating the balance sheet outstanding claims provision (OSC, including allowance for expenses and risk margins, with provision at 75% probability of sufficiency). At the present time there are heightened uncertainties and risks, particularly on the unfavourable side, with the operation of the RTW Act still to stabilise.

To assist in understanding the uncertainty, we have designed a range of scenarios which illustrate potential scheme outcomes. For each scenario we have made an approximate estimate of its impact on the OSC provision.

We have considered the uncertainty in four broad categories:

- Economic – employment, inflation, investment markets
- Legal – disputes, tribunal decisions, appeal court decisions
- Short Term claims – outcomes relating to claims whose entitlements are subject to the hard boundaries
- Serious Injury claims – outcomes for claims who are entitled to long term payments from the scheme.

There is overlap and interaction between these categories. ReturnToWorkSA has essentially no control over economic influences, full control over scheme management and some influence (but not control) over legal and behavioural risks.

We note that sensitivity analysis is indicative only of a range of possible liability outcomes. The sensitivities shown below do not represent upper or lower bounds to the scheme's outstanding claims liabilities.

12.2 Economic Scenarios

In brief, the scenarios we have considered are a stronger economy and a weaker economy; as summarised below.

Table 12.1 – Economic Scenarios

	Stronger	Weaker
Unemployment	Down to 3%	Up to 7%
Wage inflation	2.75% pa	2% pa
Investment earnings	3.75% pa	1% pa
Real 'Gap'[1]	1%	-1%

[1] Difference between inflation and discount rate

In undertaking sensitivity analysis it is straightforward to model inflation and investment earnings. In relation to unemployment, there is no clear way to estimate the impact on the cost of claims, and we refer to the RTW scenarios in the 'short term claims' section. Broadly, the claims impact will be in the same direction as other economic impacts, but the magnitude of the impact is probably smaller than that of inflation and investment changes.

Table 12.2 – Economic Sensitivities

31 Dec 19 OSC estimate (Including risk margin at 75% POS)	3,237	
Strong Economic Scenario (1% gap between inflation and discount rate)	-523	-16%
Weak Economic Conditions (-1% gap)	+465	+14%
Potential post-balance date Yield Curve	+200	+6%

Economic conditions are still currently unfavourable for scheme performance relative to long term historical norms. Notably, while valuation results are based on economic conditions as at 31 December 2019, the economy has performed particularly poorly in the first quarter of 2020, and we have therefore added a third economic scenario to show the potential impact of using post-balance date discount rates – as this shows, an updated view of the liability could be some $200 million higher than shown in this report.

12.3 Legal Risk Scenarios

As discussed in Section 3, there are currently high numbers of disputes in the scheme and the duration of open disputes is high. Further, a number of key provisions of the RTW Act are still subject to legal challenge. The table below indicates the sensitivity of results to two scenarios around dispute rates and dispute outcomes. It is likely that if the legal environment is either better or worse than we have implicitly assumed, then several experience changes could happen together.

Table 12.3 - Legal Sensitivities

31 Dec 19 OSC estimate (Including risk margin at 75% POS)	3,237	
WPI assessments increase by 2% as a result of the higher incentives under the RTW Act, resulting in extra Serious Injury claims and higher lump sum payments.	+293	+9%
Restrictions on multiple assessments ('top ups') do not work as expected.	+242	+7%

As indicated in the sensitivities above, if the WPI assessment provisions in the RTW Act do not work as intended it is possible that the impacts could be measured in hundreds of millions of dollars.

12.4 Short Term Claim Scenarios

The implementation of the RTW Act has brought significant change to the scheme, and changes in the scheme's culture. It is possible that the early changes in the scheme's experience might not be sustained if patterns of behaviour revert towards those of past years. On the other hand, it is possible that the scheme experience might outperform current projections, because of the extent of the changes in expectations and behaviour of scheme participants.

Table 12.4 summarises a number of sensitivities that help demonstrate the potential for variability in the Short Term Claim cohort.

Table 12.4 – Short Term Claim Sensitivities

	OSC Impact	
	$m	%
31 Dec 19 OSC estimate (Including risk margin at 75% POS)	3,237	
Claim Numbers		
Hearing loss frequency continues to escalate by another 50%	+17	+1%
Income Support		
Deterioration in IS continuance rates continue to follow the most recent trend	+50	+2%
Treatment Costs		
Late surgery costs emerge more than expected, approximately double the current allowance	+32	+1%
Medical costs emerge similar to recent experience due to higher medico legal costs	+10	+0%
Legal Fees		
Reductions in dispute costs under the RTW Act are lower than allowed for	+14	+0%
Higher average cost of legal fees for transitional claims due to disputes progressing further in the disputation process	+10	+0%
Expenses		
Higher expense rate of 15% for Short Term Claims due to expenses not reducing as much as gross claim costs	+21	+1%
Lump Sums		
Recent reduction in lump sum payments is due to First Paid and Economic Loss lump sum numbers reducing by 20%	-62	-2%
Economic Loss lump sum sizes emerge 20% lower than expected	-37	-1%
Transitional lump sum disputes and pending assessments all resolve in favour of claimant	+11	+0%
Lump sum numbers increase in line with ultimate claim numbers for 2018 and 2019	+11	+0%

These scenarios illustrate some of the key areas of uncertainty for Short Term Claim costs including:

- Continued deterioration of the hearing loss claim frequency would add around $17 million to the provision. While the impact is relatively modest on the OSC liability, it would also lead to a reasonably material recurrent increase in premiums.
- Further deterioration in RTW performance would increase Income Support and flow-on costs by tens of millions of dollars – as an example, if we were to fully reflect the most recent RTW rates, where experience has deteriorated noticeably in the last 6 months, this would add around $50 million to the provision.
- Treatment costs
  - Higher numbers of late surgeries – for example if there was a behaviour change whereby claimants seek to have more surgeries covered by the workers compensation system, could add $32 million to the provision.
  - Continuing high levels of medico-legal costs on older claims, where very few claimants remain on direct benefits, could readily add $10 million just to the transitional cohort. The current basis assumes very little of these costs will continue into the RTW Act claims, and this represents a further area of risk.
- Lump sums:
  - Are currently tracking lower than expected levels, which we continue to interpret as mainly being a ‘slowdown’ rather than a ‘reduction’ in lump sums. If this is not the case, and there

is in fact improvements in lump sum experience, this could result in a release of up to $64 million in the provision.

- On the other side, if the claim number growth in 2018 and 2019 were to flow straight though to higher lump sums then this would increase costs (and to be clear, the valuation basis does not anticipate any flow on to higher lump sum costs as a result of the recent RTW duration increases – if this were to occur then the costs could increase very quickly)

- Higher dispute and claims administration related costs could also impact on the provision. As an example, if the runoff of the transitional cohort continues to be slow and with more claims proceeding into the later stages of the dispute resolution process, then it could add another $50 million to the provision due to a combination of higher legal fees, medico legal fees and claims handling expenses.

12.5 Serious Injury Scenarios

With significantly higher benefits available to Serious Injury claims, the numbers of claimants becoming eligible for these benefits will have significant financial consequences for the scheme. In addition, with an increasing proportion of future claims liabilities relating to Serious Injury claims, changes in life expectancy and escalation of costs for Serious Injury claims costs will also have significant financial impacts.

Table 12.5 – Serious Injury Sensitivities

31 Dec 19 OSC estimate (Including risk margin at 75% POS)	3,237	
20 additional Serious Injury IBNR claims emerge for 2016 and 2017 with higher numbers continue for all RTW Act periods	+232	+7%
25% of WPI disputes result in a Serious Injury claim	+287	+9%
Serious Injury application disputes have a 50% success rate (currently 25%) and claims under RTW Act are all in line with 2016 accident year	+124	+4%
Unpaid care on EnABLE cohort ceases immediately and is replaced with paid care	+179	+6%
Uncertainty around mortality - impact of a 6 year increase in the life expectancy of the EnABLE claims (bringing them back in line with a standard population life expectancy)	+535	+17%
Superimposed inflation is 1% p.a. higher than assumed for medical and care, whether due to higher utilisation of services such as care and treatment, or from increasingly expensive treatments, above average award wage increases for carers, increased pressure as current unpaid family carers age, etc.	+448	+14%
Superimposed inflation is 1% p.a. lower than assumed for medical and care.	-325	-10%
No increase in utilisation of Care benefits after age 65	-104	-3%
Twice the additional allowance for utilisation of Care benefits after age 65	+82	+3%
Medical and treatment payments lowered to lowest rates in recent years	-80	-2%

Because of the very long tail of Serious Injury claims and the consequent leverage in the scheme's financial results, the scenarios illustrate some very large changes in the outstanding claims liability.

We emphasise that there is significant uncertainty around ultimate claim numbers, as indicated by the following scenarios:

- If an additional 20 IBNR claims emerge for the 2016 and following accident years (i.e. the RTW Act years), there will be an increase of around $230 million in the OSC provision. With a high number of claims remaining open beyond the two and three year benefit caps, continued emergence of new Serious Injury claims from transition periods, and many areas of the RTW Act still being tested in the courts, it is possible that Serious Injury numbers end up materially higher than our current estimates.

- If 25% of WPI disputes result in a Serious Injury claim (we currently assume around 4%, beyond those already identified as 'potential' by ReturnToWorkSA), then the increase to the provision would be around $287 million.
- If the claimant success rate on Serious Injury application disputes is higher than the level allowed for in our IBNR, the increase in the provision would be around $124 million. We note that there is no overlap between this scenario and the WPI dispute scenario (+$287 million), meaning both could occur simultaneously, or perhaps more likely there could be a partial deterioration in both assumptions which results in an equivalent impact.

Changes in the level of benefits payable for care, support and medical needs also have very significant implications for the OSC liability.

Our valuation basis has only given partial credit to the continuing lower medical and treatment payments, and so if this lower level becomes the new norm then a further $80 million reduction may be possible over time.

12.6 Key Uncertainties

There is considerable uncertainty in the projected future claim costs, in particular around how and when claims are determined to be Serious Injuries.

The main areas of uncertainty in our current estimates of the liabilities are:

- **Legal precedent risk** – risks here relate to the possibility of decisions which are unfavourable to the scheme or the culture and behaviour of its participants. In particular, there are still many claims in dispute seeking to access higher levels of benefits than ReturnToWorkSA has determined. On current timing, this risk is likely to remain for at least another two years, and perhaps longer.
- **WPI assessments** – under the RTW Act, there are significant differences between the compensation available to claims above the 30% WPI threshold and those below. This factor, combined with the lump sum for future economic loss payable to Short Term claims, means there is pressure on WPI assessments. The scheme will face significant financial consequences if this leads to either extra claims getting over the 30% WPI threshold or 'WPI creep'. The robustness of the 'once and for all' WPI assessment rules under the RTW Act is an important area of risk.
- **Serious Injury claim costs** – these claims are entitled to benefits for life, and the risks for this group relate to factors that are common across most claims, and deviations from our assumptions that compound across multiple years. For the current valuation the key uncertainties are:
  - **Ultimate numbers of claims** – there are several areas of uncertainty in relation to claim numbers. These include the impact of claimants delaying their WPI assessments, as well as the number of outstanding Serious Injury application disputes and other WPI disputes that could see claims ultimately meet the 30% WPI threshold.
  - **Life expectancy** – the future life expectancy of Serious Injury claimants has a significant impact on future cost projections.

- **Cost escalation** – the potential for future cost escalation in a number of medical, care and treatment related items poses a risk. One example is the extent to which care costs that are currently not compensated by the scheme may become compensable in future, as family-based carers age and claimants increasingly require paid attendant care and/or residential care facilities. Another example is the potential increase in costs for care related specialists and facilities, due to wage pressures and/or market demand pressures for these specialists as the National Disability Insurance Scheme continues to scale up.

- **Where claim durations for Short Term Claims will stabilise** – over the last 12-18 months there has been an increase in claim numbers and slippage in return to work outcomes (relative to the much improved RTW rates seen over the preceding few years); the rate of deterioration has increased over the last six months, particularly for claims between one and two years duration. The valuation basis has not fully responded to this most recent deterioration, so some level of improvement is required just to maintain the current liability projections.

  Further, we emphasise that no allowance has been made for increasing numbers of longer duration claims to impact on WPI assessments – that is, we have not anticipated any slippage in WPI scores, nor any increase in the number of Serious Injury claims, as a result of the increasing claim durations.

- **Outcomes for claims with current disputes** – risks here include the possibility of decisions which are unfavourable to the scheme, as well as the behavioural consequences of so many disputes remaining. Open dispute numbers remain high and more claims are moving into the later stages of the dispute resolution process.

- **Economic environment** – there is considerable uncertainty in financial markets and this is having major (post valuation date) consequences for the discount rates that are used to determine the valuation results. For example, if the valuation results were re-calculated using discount rates at different dates since 31 December (with no changes to any other element of the valuation basis) then liability increases of around $200 million would have occurred on some days; at the time of writing the movements are not as adverse as this, but the level of volatility remains high and it is difficult to anticipate how this will impact over coming months (noting also that ReturnToWorkSA has bonds in its investment portfolio that ought produce somewhat offsetting movements in value).

- **Coronavirus –** our valuation work pre-dates the emerging situation in respect of the COVID–19 Coronavirus, and as such we have not made any allowance for it to impact the claims experience as part of our work. Based only on current media reports, it appears plausible to construct scenarios that would materially impact claim costs if an outbreak were to occur in South Australia – impacts could be direct (by keeping injured workers off work for longer) or indirect (for example by reducing the availability of medical treatment options, or if there are workforce pressures that impact on claim management activity). This situation continues to evolve rapidly and will be responded to as necessary if it begins to impact claim outcomes.

Even though the RTW Act provisions commenced over four years ago, there are still key areas of the Act being tested in the courts, and there is as yet only limited information on the number of Serious Injury claims which will emerge from these cohorts. The current valuation basis reflects our best estimate of how this experience will eventuate. Over time, our basis will further reflect the developing post-reform experience, and it is possible that the experience will differ materially from our current expectations.

13 Reliances and Limitations

Our results and advice are subject to a number of limitations, reliances and assumptions. The main ones are outlined below.

13.1 Reliance on Data and Other Information

We have relied on the accuracy and completeness of the data and other information (qualitative, quantitative, written and verbal) provided to us by ReturnToWorkSA for the purpose of this report. We have not independently verified or audited the data, but we have reviewed the information for general reasonableness and consistency. The reader of this report is relying on ReturnToWorkSA and not Finity for the accuracy and reliability of the data. If any of the data or other information provided is inaccurate or incomplete, our advice may need to be revised and the report amended accordingly.

13.2 Uncertainty

13.2.1 Emergence of Key Legal Precedent

Realising the expected long term financial savings from introducing the RTW Act depends on the effectiveness of maintaining the boundaries in practice. Any legal precedent that causes 'slippage' in the application of the boundaries will have an unfavourable impact on scheme costs.

There continues to be an unusually high number of cases on appeal to the Supreme Court and until these cases are resolved there will be uncertainty as to the financial costs which eventuate under the RTW Act benefit package.

13.2.2 Other Uncertainty

There is considerable uncertainty in the projected outcomes of future claims costs, particularly for long tail claims; it is not possible to value or project long tail claims with certainty. Our payment projections for Serious Injury claims, in particular, include payments which are expected to occur many decades into the future.

We have prepared our estimates on the basis that they represent our current assessment of the likely future experience of the scheme. Sources of uncertainty include difficulties caused by limitations of historical information, as well as the fact that outcomes remain dependent on future events, including legislative, social and economic forces, and behaviour by scheme stakeholders such as Corporation management, claimants and claims agents.

In our judgement, we have employed techniques and assumptions that are appropriate and the conclusions presented herein are reasonable given the information currently available, subject to our comments above. However, it should be recognised that future claim outcomes and costs will likely deviate, perhaps materially, from the estimates shown in this report.

The uncertainty at the current valuation is heightened by the need to allow for the impacts of the RTW Act. While its key features came into effect back in July 2015, legal testing of its implementation is still occurring and likely to take a number of years to complete, as noted above.

Our valuation assumes a continuation of the current environment with allowance for known changes where we have been able to quantify or estimate the effects. It is possible that one or more changes to the environment could produce a financial outcome materially different from our estimates.

13.3 Latent Claims

We have made no allowance for catastrophic aggregation of claims from latent sources (such as claims relating to asbestos) other than as reflected in the data and information we have received. Latent claim sources are those where the date of origin of a claim is many years before the claim is reported.

There has been a lot of focus on potential new sources of silicosis claims recently, but at this time it does not appear that ReturnToWorkSA is impacted anywhere near as much as some of the Eastern states. While there are negligible claims to date, information from the recent external screening program has identified a group of 22 workers with evidence of silicosis or other lung diseases. As such, it now seems more likely that silicosis claims could emergence over time, and we will continue to monitor developments regarding this area of risk.

13.4 Reinsurance

We understand that there is no reinsurance program in place in relation to any of the liabilities we have valued.

13.5 Limitations on Use

This report has been prepared for the sole use of ReturnToWorkSA's board and management for the purpose stated in Section 1. At ReturnToWorkSA's request, we consent to the release of this report to the public, subject to the reliances and limitations noted in the report.

Third parties, whether authorised or not to receive this report, should recognise that the furnishing of this report is not a substitute for their own due diligence and should place no reliance on this report or the data contained herein which would result in the creation of any duty or liability by Finity to the third party.

While due care has been taken in preparation of the report Finity accepts no responsibility for any action which may be taken based on its contents.

Finity has performed the work assigned and has prepared this report in conformity with its intended utilisation by a person technically competent in the areas addressed and for the stated purpose only. Judgements about the conclusions drawn in this report should be made only after considering the report in its entirety, as the conclusions reached by a review of a section or sections on an isolated basis may be incorrect.

This report, including all appendices, should be considered as a whole. Finity staff are available to answer any questions, and the reader should seek that advice before drawing conclusions on any issue in doubt.

Any reference to Finity in reference to this analysis in any report, accounts or any other published document or any other verbal report is not authorised without our prior written consent.

14 Scheme History

This section summarises the key events and changes in the scheme since major reforms in 2007.

2007-08

Changes to the Workers Rehabilitation and Compensation Act passed by the South Australian Parliament. The key aim was to place greater focus on earlier rehabilitation and return to work outcomes.

2008-09

Key components of the 2008 legislative changes commenced: earlier step-downs for IS claims; Work Capacity Assessment; changes to non-economic loss payments; changes to the dispute resolution framework (including Medical Panels introduced); provisional liability.

2009-10

- 'Window' for continuation of redemptions under previous legislation closed 1 July 2010
- Replacement of IT system IDEAS with Curam
- Change to process for reimbursement of weekly payments to employers
- Initial projects commenced under the $15 million Return to Work Fund.

2010-11

- Bonus/Penalty scheme for employer levies discontinued.

2011-12

Claims estimates introduced for all claims.

2012-13

- New employer payments scheme commenced 1 July 2012, with compulsory experience rating for medium and large employers, and optional 'retro paid loss' arrangement for large employers
- Second claims agent, Gallagher Bassett, commenced 1 January 2013 (Employers Mutual Limited had been the sole agent since 1 July 2006)
- Second legal service provider, Sparke Helmore, commenced 1 January 2013.

2014-15

The **Return To Work Act 2014** was passed in late 2014, with major changes to the scheme and claimant entitlements. Key provisions took effect 1 July 2015.

The main features of the reforms, for claims occurring from 1 July 2015, were:

- A tighter link between employment and injury before compensation is available
- For Seriously Injured workers: ongoing benefits, reduced emphasis on RTW, access to common law benefits for economic loss

- Introduction of boundaries on claim duration for ‘non-serious injuries’: 104 weeks for weekly benefits and 52 weeks thereafter for medical costs
- New lump sum payment for loss of future earning capacity for non-serious injuries with WPI of 5% or more.

A number of **Regulations** in June 2015 impacted on the operation of the RTW Act. The changes related to pre-1 July 2015 injuries and allow:

- ‘Top-up’ payments for non-economic loss in limited circumstances; approval to seek further compensation was required before 1 July 2016
- Coverage of future surgeries and up to 13 weeks of IS benefits for existing non-Serious Injuries, even if surgery falls outside the standard time boundaries.

2015-16

The premium system was changed so that nearly all employers were subject to experience rating, but under a new and much simpler system.