Scheme Actuarial Valuation as at 30 June 2018

ReturnToWorkSA

August 2018

At ReturnToWorkSA's request we have consented 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.

Actuarial and Insurance Consultants

28 August 2018

Ms Joanne Denley
Chair
ReturnToWorkSA
400 King William Street
ADELAIDE SA 5000

Dear Ms Denley

Scheme Actuarial Valuation as at 30 June 2018

Enclosed is our report on the 30 June 2018 scheme actuarial valuation.

As has been the case at recent valuations, the performance of the Short Term Claims segment of the scheme appears to be stabilising, but there is still considerable uncertainty about the ultimate cost of Serious Injury claims, particularly in relation to the number of such claims that will eventuate each year. These uncertainties will not resolve until key legal precedent is established in relation to a number of the RTW Act provisions, and it is likely to be at least another year, perhaps longer, before the real-world operation of the Act is known with more confidence.

We emphasise that all of our valuation work has been undertaken on the basis that the *Mitchell* decision will be overturned on appeal. This means there is no allowance for *Mitchell*-related costs in the central estimate projection, other than legal costs. If *Mitchell* is not overturned then the scheme's outstanding claims liability will be significantly higher than the estimates in this report, and we expect would exceed the provision recommended for a 75% probability of sufficiency.

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

Fellows of the Institute of Actuaries of Australia

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Scheme Actuarial Valuation as at 30 June 2018

Glossary

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 are 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	Claims that do 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 30 June 2018.

Our previous actuarial review was as at 31 December 2017, and was documented in a report dated 8 March 2018.

2 Scope of the Review

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

The primary purpose of the annual 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. ReturnToWorkSA use these estimates in determining the provision for outstanding claims in its annual financial statements.

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 allow for the expected impacts of the Return to Work Act 2014 ("RTW Act") which governs the scheme, and separately project future benefits for Serious Injury claims and for Short Term Claims, reflecting the differences in benefit structure between the two groups.

As has been the case at the last two half-yearly valuations, and following discussion and agreement with ReturnToWorkSA's Board and management, all of our valuation work has been undertaken on the assumption that the *Mitchell* decision will be overturned on appeal. This means there is no allowance for *Mitchell*-related costs in the central estimate projection, other than legal costs. If *Mitchell*, and potentially other key decisions that are in the dispute resolution system, are not overturned on appeal then the liability will be higher than is shown in this report.

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. While legal precedent uncertainty has been considered in setting the risk margin loading at this valuation, particularly in the context of the high number of decisions on appeal to the Supreme Court, the risk margin has *not* been set at a level that would cover the increased costs if these adverse precedents are maintained. For example, if the *Mitchell* decision were to be upheld, the revised central estimate would likely exceed the current recommended provision at the 75% probability of sufficiency level.

4 Scheme Environment

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

- **Legal precedent**: key sections of the RTW Act continue to be tested through the scheme's dispute resolution processes, and legal precedent on a number of key issues has been slow to emerge. Of particular importance to our assessment are the provisions about how and when a claim is determined to be a Serious Injury (the *Mitchell* case is an example). It appears that it is likely to take at least another 12 months until key precedent is established.
- **South Australia's economy**: unemployment rates have reduced and wages growth appears to be increasing, albeit off a low base. While this appears to be a more favourable environment than in recent years, claim expenses and scheme costs will still need to be tightly controlled in order to prevent pressure on premium rates.
- **Dispute resolution and appeals**: the number of open disputes has continued to rise, and the time to resolution is increasing. We also understand that more claims are appealing dispute decisions, following changes in the RTW Act that mean legal costs are no longer at risk on an appeal. This is both lengthening disputes and increasing legal costs.
- **Scheme Review:** under section 203(1) of the RTW Act, a review of the RTW Act, its administration and operation was required to be undertaken three years after its commencement on 4 December 2014. This review was undertaken by The Hon. John Mansfield AM QC and has now been tabled in Parliament. At the time of our work, government has acknowledged the Scheme Review report, but has not made or announced any changes to the legislation governing the scheme. Our valuation work assumes continuation of the existing legislation; that is, we have not anticipated any changes to the legislation or regulation governing the scheme on account of the Scheme Review or the recommendations contained therein.

5 Recent Claim Experience

The key features of the claims experience in the six months to 30 June 2018 were:

- For claims managed entirely under the RTW Act:
  - New claim numbers have increased in the last year. While the growth in wages noted above will explain some of this increase, at this stage claim numbers are projected to grow by more than the growth in exposure.
  - The early intervention and RTW focus through mobile case managers continues to see claim durations at historical scheme lows. Over the last 12 months the rate of improvement has slowed, so further improvements are likely to be more gradual than those seen in the last two to three years.
  - Lump sum payments are currently low, due to a slowdown in WPI assessments. Most claims reaching two years on income support benefits are yet to have had a WPI assessment.
  - The number of disputes per month is running about 40% lower than pre-reform levels, which has favourable implications if maintained. That said, we expect dispute numbers will increase as the number of WPI assessments increases.
- For transition claims, there continues to be a much higher than anticipated level of disputation, with some 1,500 disputes still open on claims from the transition cohort. Following implementation of

the final time-cap boundary under the RTW Act (cessation of medical benefits at June 2018 for claims whose income support ceased at June 2017), there are relatively few transition claims on direct benefits at the current time.

- The number of new Serious Injury claims in the six months was again higher than expected. This is surprising, as we (and ReturnToWorkSA) had expected that most applications from these transitional claims would have been completed shortly after the cessation of income support in June 2017. Given the slowdown in WPI assessments on RTW Act claims, there is only limited information on Serious Injury claim numbers for these cohorts, and as such there is still considerable uncertainty around this component of the valuation.

Total net claim payments in the six months were $36 million (19%) lower than expected, of which $32 million was due to lump sum payments taking longer to be made than projected.

6 Liability Valuation Results

Summary of Results

Our central estimate of the scheme's outstanding claims liability for registered employers as at 30 June 2018 is $2,275 million. This is a discounted (present value) estimate, net of recoveries and including allowance for future expenses. Adding a risk margin of 15.0% to produce a provision with a 75% probability of sufficiency, consistent with ReturnToWorkSA's reserving policy, gives an outstanding claims provision of $2,616 million, as shown in Table 1.

Table 1 – Recommended Balance Sheet Provision

	Central Estimate	Risk Margin	Recommended Provision
	$m	$m	$m
Gross Claims Cost - Serious Injuries	1,514		
Gross Claims Cost - Short Term Claims	609		
Claims Handling Expenses	205		
Gross Outstanding Claims Liability	2,328	349	2,677
Recoveries	-53	-8	-61
Net Outstanding Claims Liability	2,275	341	2,616

Table 1 also demonstrates that the majority of the OSC liability relates to Serious Injuries. The balance will continue moving toward Serious Injury liabilities over time. The provision includes an allowance for future claims handling expenses equivalent to 10% of gross claim costs.

Movement in Liability

Our central estimate is $113 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, where slower than expected lump sums lead to an increase in the remaining liability.
- 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, as shown in Table 2 below.

Table 2 – June 2018 Central Estimate and Determination of Actuarial Release/(Strengthening)

	Central Estimate		
	Liability Estimate[1]	AvE Payments in 6 mths to Jun-18	Actuarial Release [2]
	$m	$m	$m
Liability at Dec-17 Valuation	2,121		
Projected Liability at Jun-18 (from Dec-17 valuation)	2,162		
Claims Movement - Short Term Claims	36	-23	-13
Claims Movement - Serious Injury	47	-12	-35
Impact of Change in economic assumptions	29		
Recommended Liability at Jun-18	2,275		
Total Actuarial Release			-48

[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** (negative release) of $48 million for the period, which is an unfavourable result for the scheme. Changes to economic assumptions further increase the central estimate by $29 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.

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	4	-31	-27	-6%
Lump Sums	0	-5	-5	-2%
Legals	-10	-1	-11	-14%
Treatment Related [1]	-5	3	-1	0%
Rehabilitation	5	3	8	14%
Other Costs [2]	-1	0	-1	-6%
Recoveries	2	0	1	2%
Total Claim Costs	-4	-31	-35	-2%
Expenses	-9	-4	-13	-7%
Net Central Estimate	-13	-35	-48	-2%

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

[2] Investigation, common law , commutation, LOEC

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

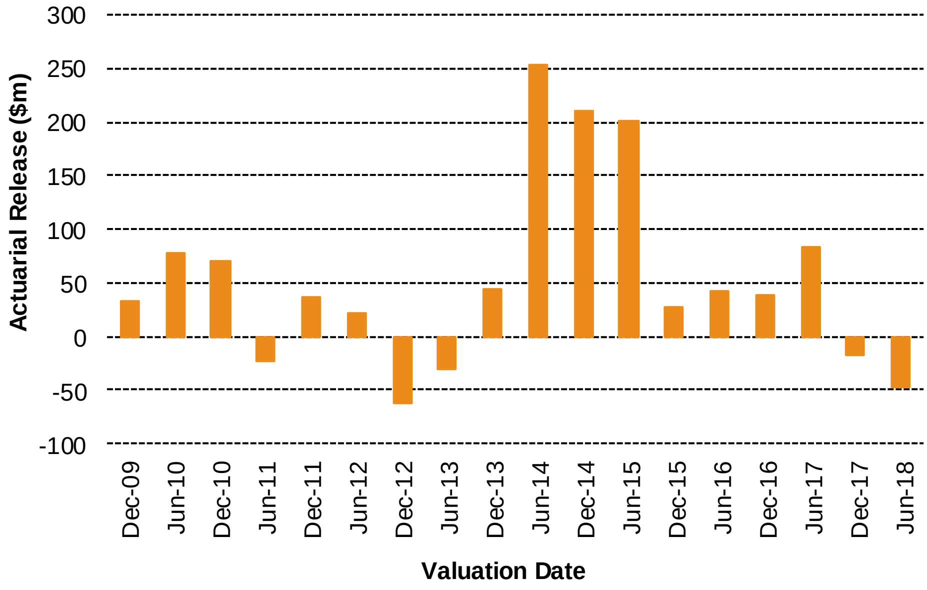
The movements which contribute to the $48 million actuarial strengthening are:

- For **Short Term Claims**, the $13 million actuarial strengthening comprises:
  - A net release of $4 million for income support, following further improvement in claim durations as a result of RTW improvements
  - An increase of $10 million for legal payments to reflect the high number of open disputes and slower resolution, as well as the high number of legal matters outstanding in the Supreme Court
  - An increase of $5 million for medical payments to reflect higher medical report costs
  - A decrease of $5 million following lower utilisation of rehabilitation services
  - A $9 million strengthening on claims handling expenses due to the slower than expected run-off of transition claims and disputes.
- For **Serious Injury claims**, there was an overall strengthening of $35 million, due to:
  - Net changes in Serious Injury claim numbers (including IBNR claims) increasing the liability by $55 million, as new claim numbers from the transition cohort continue to be higher than expected
  - Changes in the status of already known Serious Injury reducing the liability by $5 million
  - Changes in valuation basis changes releasing $6 million
  - Lower than expected payments (largely related to lump sum timing) resulting in a release of $12 million
  - A $4 million strengthening on claims handling expenses.

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 eight years. As this shows, the current financial year's results (two strengthenings) follow a series of releases over the previous four years. The driver for both of this year's strengthenings is the cost of transition claims, where there have been more late claims determined as serious injuries and high levels of dispute (and slow resolution of those disputes).

Figure 1 – History of Actuarial Releases/(Strengthenings)



Impacts of Economic Assumption Changes

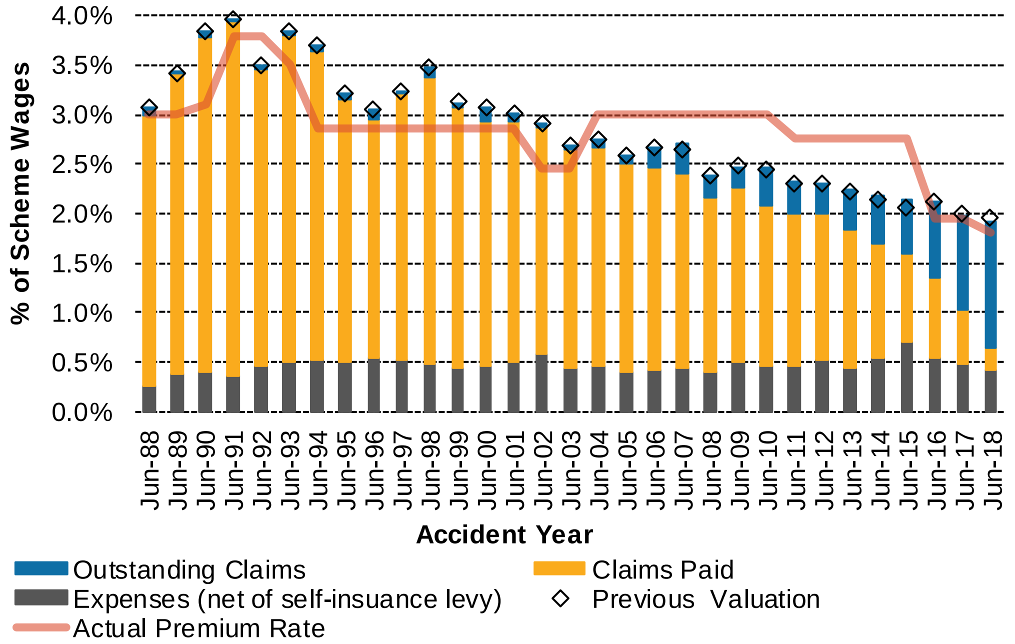
Changes to inflation and discount rate assumptions increased the central estimate by $29 million. As discussed in Section 10.1, decreases in discount rates at long durations, which are outside ReturnToWorkSA's control, have led to this increase. These decreases have been partially offset by reductions in projected wages growth.

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 since 2011 the costs are lower again, as claims have had less opportunity to remain on long term benefits
- The current estimate of the BEP for the 2018 accident year is 1.93%, down from 1.99% for the 2017 year, which is due to a combination of lower expenses and improvements in RTW
- Scheme expenses were relatively high from 2014 to 2016, and particularly high in 2015, as a result of additional transition related requirements. 2017 and 2018 scheme expenses are lower, and ReturnToWorkSA expects to see some further reduction as transition related activities are completed.

We note that these calculations assume past and future investment earnings at the risk free rate. 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 2018 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 behaviours of its participants. In particular, recent decisions have gone against ReturnToWorkSA's interpretation of the WPI assessment rules and if maintained would lead to increases in the liability; these decisions are currently under appeal. On current timing, this risk is likely to remain for at least another year, and perhaps longer.

  As noted, all of our valuation work has been undertaken on the basis that the *Mitchell* decision will be overturned on appeal. This means there is no allowance for *Mitchell*-related costs in the central estimate projection, other than legal costs. More information on this uncertainty is found in Section 13.2.1. Importantly, we note that if the *Mitchell* decision were to be upheld, the revised central estimate would likely exceed the current recommended provision at the 75% probability of sufficiency level.

- **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 new lump for future economic loss payable to Short Term Claims, means there will be increasing 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** – as these claims have benefits for life, the biggest risk for this group are 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:

  - **Life expectancy** – the future life expectancy for Serious Injury claims 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 (for example, as the NDIS scales up in the next few years).

  - **Ultimate numbers of claims** – there are several areas of uncertainty in relation to claim numbers, including: the ultimate number of top-ups that are yet to emerge due to legislation changes, the impact the removal of WPI top-ups will have on ultimate claim numbers, and the number of outstanding Serious Injury application disputes and other WPI disputes that ultimately meet the 30% WPI threshold.

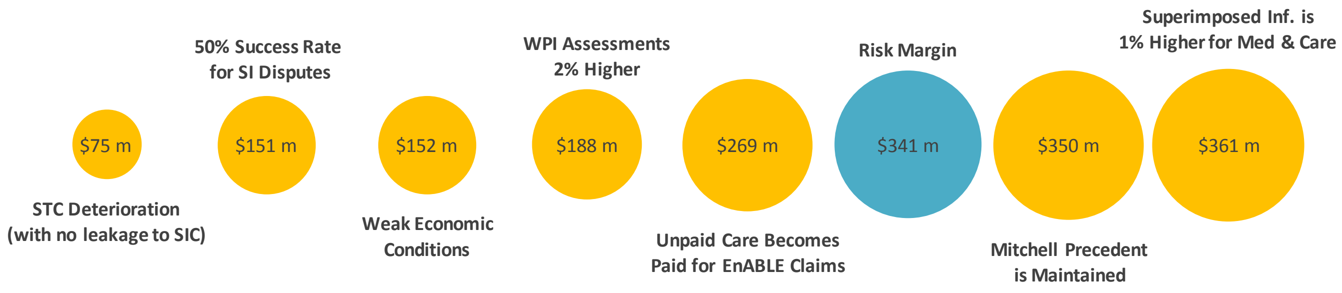
- **Return to work** – there have been improvements in return to work outcomes for claims managed entirely under the RTW Act, and it is likely that this will improve further still if changes in the scheme culture can be sustained. Counter to this, there continues to be significant legal involvement on transition claims, and if this carries through to the RTW Act cohort the sustainability of recent improvements could be at risk.

- **Compensability and claim acceptance** – there was thought to be potential for further reductions in new claim numbers following changes to compensability rules, but current precedent suggests this is not going to eventuate. Regardless, it will be crucial to ensure that past closed claims cannot come back onto benefits – for example, to ensure that past Work Capacity discontinuances or claims which have been discontinued at the two year boundary do not start new claims or 'restart the clock' following a short return to work.
- **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 are again increasing quickly, and more claims are moving into the later (and higher cost) stages of the dispute resolution process.

Even though the RTW Act provisions commenced on 1 July 2015, 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, based on our and ReturnToWorkSA's interpretation of the intent of the Act. Over time, our basis will further reflect the developing post-reform experience, and it is possible that the experience could differ, perhaps 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, relative to the risk margin adopted in the liability reserves (which is shown in blue).

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. While most of the larger uncertainties would emerge over the long term, the *Mitchell* decision stands out as a risk that could lead to a very significant step change in the liability reserves.

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 30 June 2018.

We have carried out half-yearly actuarial reviews since June 2003; the most recent was as at 31 December 2017, as documented in a report dated 8 March 2018.

1.2 Scope of the Review

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

The primary purpose of the annual 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 in determining the provision for outstanding claims in its annual financial statements.

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 300 issued by the Institute of Actuaries of Australia sets out the standards required of actuaries preparing estimates of the liability for outstanding claims of statutory authorities involved in general insurance activities. This valuation report has been prepared in accordance with this professional standard (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 the Accounting Standard'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 11	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, and for the emerging experience to date, other than in relation to a number of recent SAET decisions which are under appeal, as discussed below.

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.

As has been the case at the last two half-yearly valuations, and following discussion and agreement with ReturnToWorkSA’s Board and management, all of our valuation work has been undertaken on the assumption that the *Mitchell* decision will be overturned on appeal. This means there is no allowance for *Mitchell*-related costs in the central estimate projection, other than legal costs. More information on this uncertainty is found in Section 13.2.1.

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.

Importantly, we note that if the *Mitchell* decision were to be upheld, the revised central estimate would likely exceed the current recommended provision at the 75% probability of sufficiency level.

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 30 June 2018. 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.

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 Employers Mutual and Gallagher Bassett. This included briefing sessions on 2 July 2018 and operational information that was separately provided.

The additional information we received included:

- Tableau based monthly monitoring reports containing:
  - 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
- 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

  At this valuation there were some EnABLE estimates that were not able to be used due to an unintended change in the estimation approach following a recent staffing change. As a result the claims information from six months ago has been relied upon; given the very long tail nature of these claims we do not believe this is a problem for the reserving. We do not expect this to be an ongoing issue as the new staff are being trained in the established estimation approach.
- All Serious Injury applications with current decision
- A list of open Serious Injury application disputes
- Information on WPI assessments including:
  - Completed and in-progress assessments by accident period
  - Disputed assessments by accident period

  - Lump sum payment status of completed disputes
- Information on disputes including:
  - Number of open and finalised disputes by accident year and latest disputation phase
  - Aggregate worker legal cost of finalised disputes by claim
- Additional information including:
  - List of Transitional Regulation 5 applications and their current status
  - List of pre-approved surgeries and the current status.

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 December 2017 valuation.

3.1.1 Scheme Review

Under section 203(1) of the RTW Act, a review of the RTW Act, its administration and operation was required to be undertaken three years after its commencement on 4 December 2014. This review was undertaken by The Hon. John Mansfield AM QC and has now been tabled in Parliament.

In his report, "Independent Review of the Return To Work Act 2014", Mr Mansfield has made 20 recommendations, some of which would require legislative amendment.

At the time of our work, government has acknowledged the Scheme Review report, but has not made or announced any changes to the legislation governing the scheme. Our valuation work assumes continuation of the existing legislation; we have not anticipated any changes to the legislation or regulation governing the scheme on account of the Scheme Review.

3.1.2 Legal Precedent under the RTW Act

Key sections of the RTW Act are being tested through the scheme's dispute resolution processes. In the last six months a number of these key cases have completed the various appeal processes, although the case that presents the greatest financial risk to the scheme (*Mitchell*) is still to be finalised (indeed it is still yet to be heard). There remains a higher than usual number of cases on appeal to the Supreme Court (or awaiting leave to appeal), and until these cases are resolved there will be uncertainty as to the financial costs which eventuate under the RTW Act benefit package.

Mitchell

Under the current operational implementation of the RTW Act, injuries are not allowed to be 'combined' for a WPI assessment, including any secondary injuries that arise from medication use. This approach was rejected by SAET in *Mitchell*[1], where the assessed WPI of 26% on the primary back injury was increased to 70% (an increase of 44%) by SAET. The Supreme Court has granted permission to appeal this decision, although at the time of our work the matter has not yet been listed for hearing.

If this decision is maintained on appeal it would materially increase the number of claims that can access Serious Injury benefits; *Mitchell* also has implications for other areas of the scheme, but its impact on Serious Injury claim numbers is the most important for the scheme's claim costs.

As stated in Section 2.1.1, our assessment of the outstanding claims liability assumes the *Mitchell* precedent is overturned on appeal. If this is not the case, the outstanding claims liability would be materially higher than shown in this report.

[1] Return to Work Corporation of South Australia v Mitchell [2017] SAET 81

Given *Mitchell* is still yet to be listed for hearing in the Supreme Court, we are advised that it is unlikely to be resolved within the next six months, so this uncertainty is likely to continue for at least the next year.

Li

The case of *Li*[2] relates to the "reasonable administrative action" clauses in the RTW Act, that exclude some claims from being eligible for compensation for psychological injury if prescribed circumstances are met.

The Supreme Court decision in *Li* essentially re-establishes the approach to how these provisions operated prior to the SAET decision; the original SAET *Li* decision had substantially reversed much of this established practice.

This essentially maintains the status quo in relation to new psychological injury claim acceptance, so we have maintained our previous basis.

Rudduck, Karpathakis

The *Rudduck* and *Karpathakis*[3] cases considered surgery that is required outside the normal time boundaries for medical benefits, and the approval process that accompanies these surgeries (the appeals were heard concurrently by the Full Court).

A very brief summary of the process is that an application for future surgery must be lodged within the medical entitlement period, and results in a removal of the medical time limit for the specified surgery. The injured worker still needs to justify the need for surgery and demonstrate the necessary link to work injury at some point in the future, before the surgery takes place.

This decision is broadly in line with the previous reserving basis, so there have been no changes made to the OSC reserves in response.

Other Cases

There are other cases that are key to the long term operation of the Return To Work scheme and are still to be resolved. These cover a wide range of areas including:

- Combining of injuries for WPI assessment purposes and lump sum purposes
- Whether employment is the significant cause of secondary injuries or injuries away from the workplace
- The reviewability of decisions and past agreements.

It is likely that in the next 12 months there will be more decisions that give clarity as to the application of the various RTW Act legislative provisions. In some areas it may take longer for precedent to emerge.

[2] Li v Department for Health and Ageing [2017] SAET 75; Department for Health and Ageing v LI [2018] SASCFC 52
[3] Return To Work Corporation of South Australia v Karpathakis; Return To Work Corporation of South Australia v Rudduck [2018] SASCFC 45

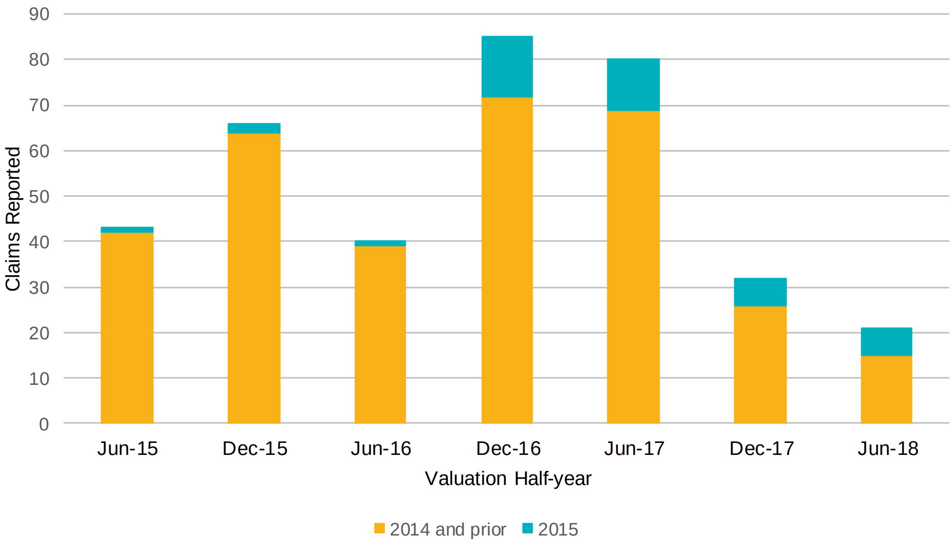
3.2 Scheme Boundaries

3.2.1 Management of Serious Injury Claim Scheme Boundaries

Serious Injury applications and assessment of 30% WPI is the most material scheme boundary from a financial perspective. We are now three years into the RTW Act, and the emergence of Serious Injury claims from the transition cohort has continued for longer than expected; this is primarily due to the degree of disputation in relation to decisions and the slowness of key legal precedent to emerge.

In the last six months there have continued to be new 'old Act' Serious Injury claims recognised. These have come from a range of sources including: new applications for recognition as a Serious Injury, disputation of previous decisions, claims with approval for additional WPI assessments under the transitional regulations, and claims with WPI disputes. Figure 3.1 shows the emergence of the current cohort of Serious Injury claims (excluding Severe Traumatic injuries as these tend to be identified quickly) for transitional periods.

Figure 3.1 – Newly Identified Serious Injury Claims (Transition claims only)



Given income support on transition claims ended on 30 June 2017, we had previously expected that most applications for Serious Injury would have already been lodged. This means that the additional Serious Injury claims have led to an increase in our allowances.

There are still a large number of disputes in relation to WPI assessments and Serious Injury applications, so there is still material uncertainty about how many claims will access the Serious Injury benefit package – even before considering the potential for adverse legal precedent to emerge.

Given the length of time it has taken for Serious Injury numbers to emerge, it is still too early to confidently estimate the number and cost of Serious Injury claims for RTW Act periods.

Our allowances for Serious Injury claims are discussed further in Section 4.2 and Section 9.

3.2.2 Management of Short Term Claim Scheme Boundaries

At June 2018 the scheme has now implemented the last of the transition boundaries, with all the Short Term Claim boundaries now being a 'business as usual' process. This includes:

- In June 2016 the first of the RTW Act scheme's hard boundaries came in to operation, ceasing benefits for some 'medical only' claims.
- In 30 June 2017 the first group of claims reached the RTW Act's income support 104 week boundary, this included all transitional claims who had their claim accepted under the old Act.
- In 30 June 2018 the last transitional boundary commenced, that being the 52 weeks of additional medical entitlement for those claims which ceased income benefits on 30 June 2017.

So far the scheme's experience has been smooth implementation of these processes.

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.

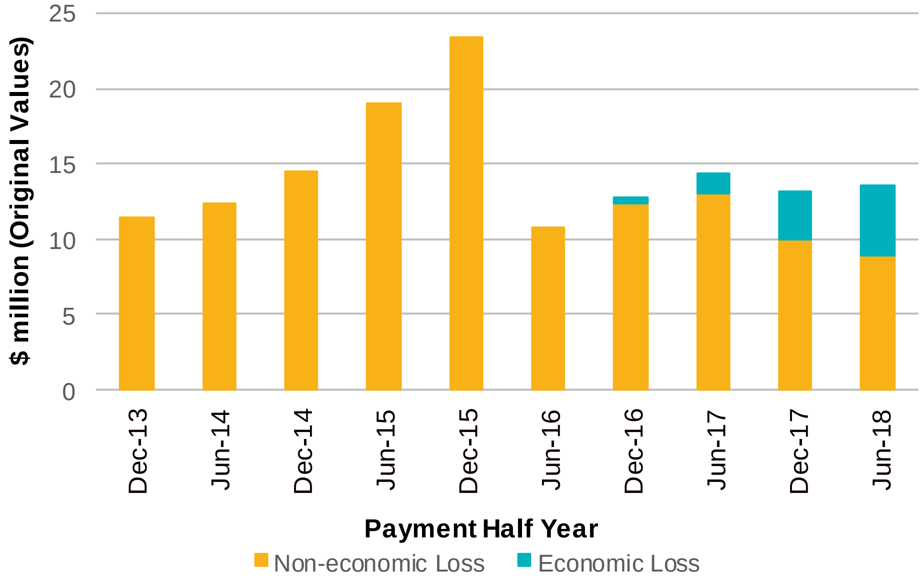
3.3.1 Slowdown in Lump Sum Activity

Lump sum payments have remained reasonably stable over recent periods, and are well below our expectations (as per the previous and recent valuation basis). We have been expecting lump sum payments to increase for two reasons:

1. The RTW Act introduced additional Economic Loss lump sum benefits while at the same time removing access to 'top up' lump sums; given Economic Loss lump sums are a much larger benefit than top up lump sums, this is expected to materially increase lump sum payments
2. The 104 week cap on income support was expected to lead to the earlier payment of lump sums. Speeding up the payment pattern would lead to a temporarily higher level of lump sum payments, before they return to a 'steady state' level.

Contrary to our expectation of increased lump sum payments, the numbers of claims receiving lump sum payments have reduced since the introduction of the RTW Act. Figure 3.2 shows the value of lump sum payments to claims getting a first lump sum payment by six-month period (excluding death benefits and deafness lump sums, as these were not impacted by the reforms).

Figure 3.2 – Value of New Lump Sum Payments (Short Term Claims only, excluding death and deafness payments)



The two main reasons we have identified for this slowdown are: (1) high levels of disputation and delays in key legal precedent emerging, which have slowed the WPI assessment process, and (2) anecdotally, we are advised that some claimants are seeking to delay their WPI assessment due to concerns that they could 'deteriorate' in future, and the 'once and for all' assessment rules would preclude them from having a further assessment.

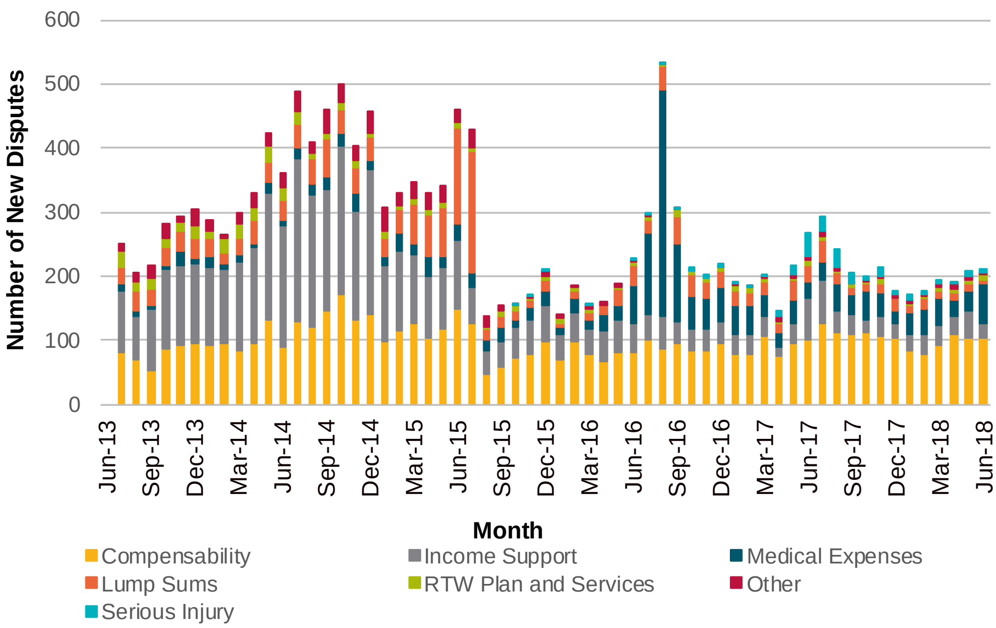
As a result, lump sum payments have been only around 50% of expected levels in recent times.

Following additional investigation for this review, we still believe that the lower than expected lump sum payments are a result of delays in completing WPI assessments, rather than a reduction in the number of claims eligible for lump sums. The lump sum valuation basis is discussed further in Section 6.

3.3.2 Dispute Numbers and Dispute Resolution

Dispute numbers were high during 2013, 2014, and the first part of 2015, due to greater numbers of claim rejections and Work Capacity decisions (under the old Act; these provisions no longer exist under the RTW Act). Dispute numbers then fell dramatically after 1 July 2015 under the RTW Act, 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 3.3.

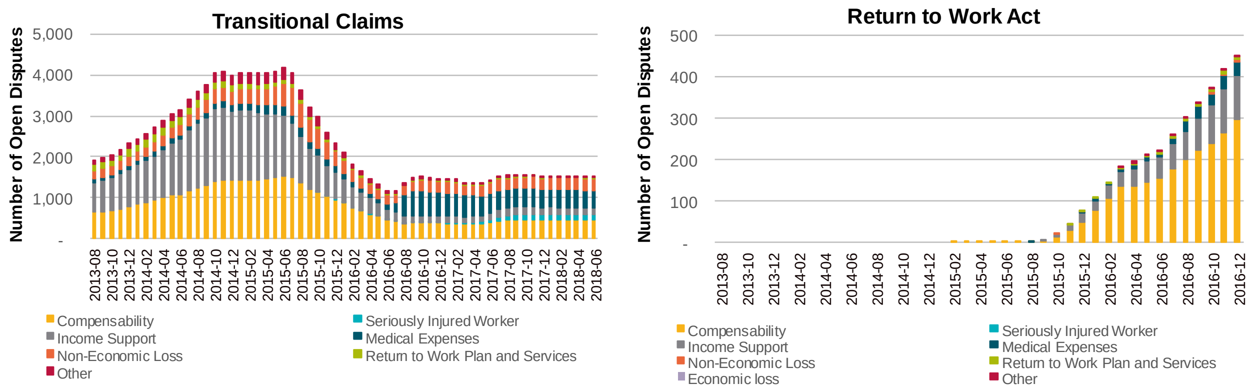
Figure 3.3 – New Disputes by Dispute Type (monthly)



Since October 2016, dispute numbers have averaged just over 200 per month, which is similar to the 'Old Act' experience prior to 2013. While it appears that current dispute numbers are more or less in line with earlier historical levels in aggregate, there continue to be favourable signs that disputes have reduced for claims managed entirely under the RTW Act – we do caution, however, that with the recent slowdown in WPI assessments, it is likely that RTW Act dispute numbers will continue to increase over the coming year.

Figure 3.4 shows the number of open disputes over time, separately for RTW Act claims and 'Old Act' claims.

Figure 3.4 – Open Dispute Count



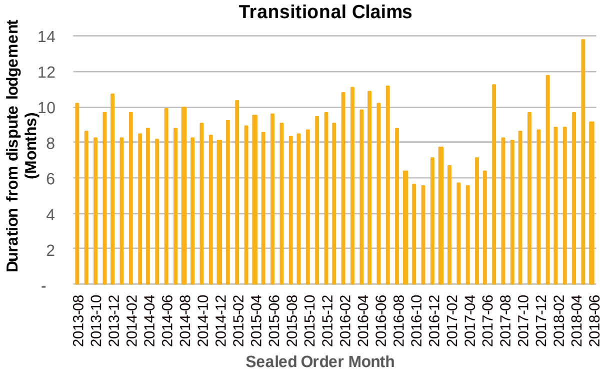
Our observations are:

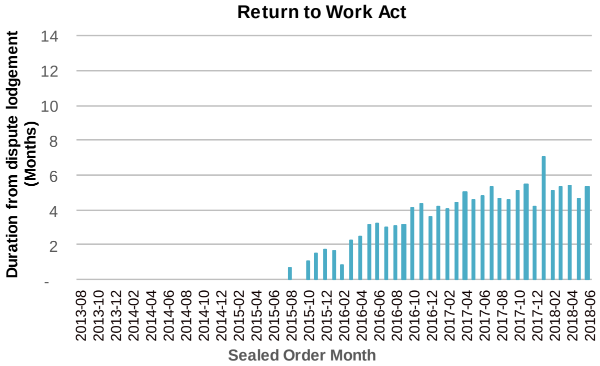
- There are still around 1,500 disputes open for transitional claims, and this number has not reduced for two years; new disputes continue to offset the number of disputes that are closed. We consider this to represent a material risk to our liability estimate (as context, the IBNR allowance for future Serious Injury claims for the transitional claim cohort is only 55 claims).

- The open dispute count for RTW Act claims continues to grow rapidly, indicating that 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.

Figure 3.5 shows the time taken for disputes to resolve. For transitional claims, the average duration of settled disputes has returned to longer term levels of around 9-10 months from dispute lodgement. For RTW Act claims, the speed of resolution is currently faster than for transition claims – although given the growing pool of open disputes, there is likely to be some further increases in the time to resolution. Since income support benefits for most claims are capped, even a five month dispute resolution timeframe is considered slow.

Figure 3.5 – Average Time to Resolution





4 Recent Claims Experience

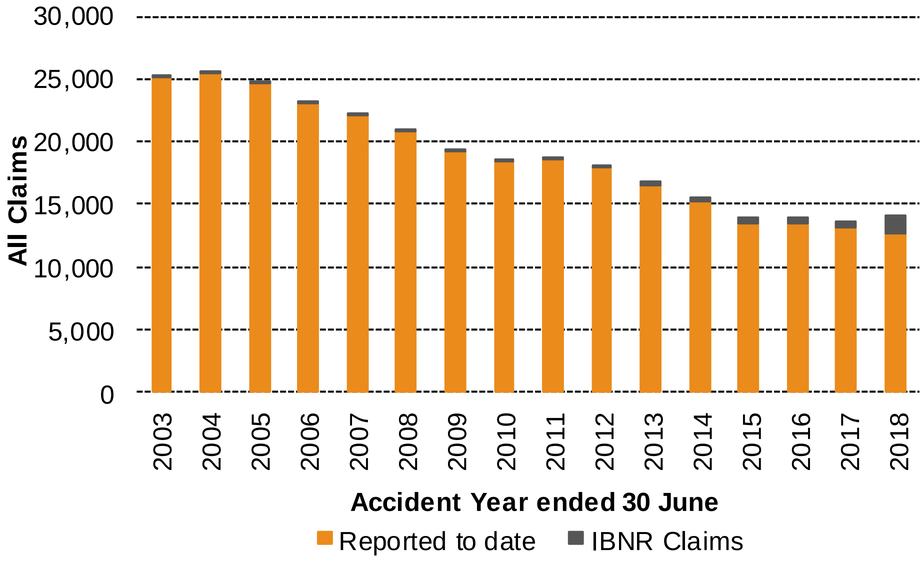
This section provides a high level analysis of scheme experience, including the numbers of new claims and overall payment trends.

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 main feature of the experience is a general downwards trend, which began in the 1990s. There were reductions in most years up to 2015, before a levelling out over the last four years. Our current estimate of 13,982 claims for the 2016 accident year is 0.5% higher than the projected number for 2015. Our estimate for 2017 (13,680) is 2.1% lower than 2016. The 2018 estimate has seen an increase in the last six months to 14,189, representing an increase of 3.7% from 2017.

4.1.2 Income Support Claims

Income Support (IS) claims are those who receive more than 10 days of lost time benefits. In addition to the early RTW focus, which aims to stop claims getting to 10 days of lost time, the change in operational policy to focus on tighter claim acceptance, which began in late 2013, reduced the number of IS claims between 2013 and 2015.

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

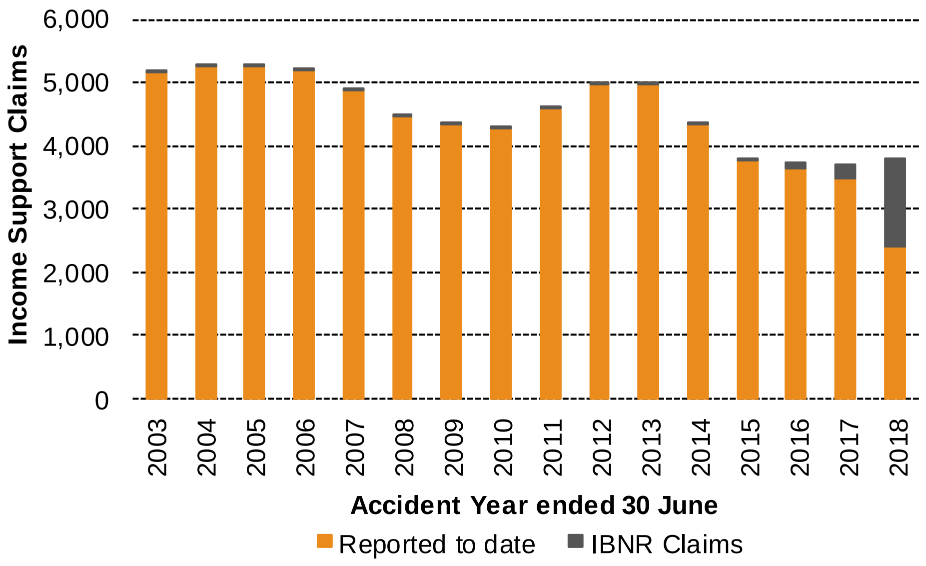


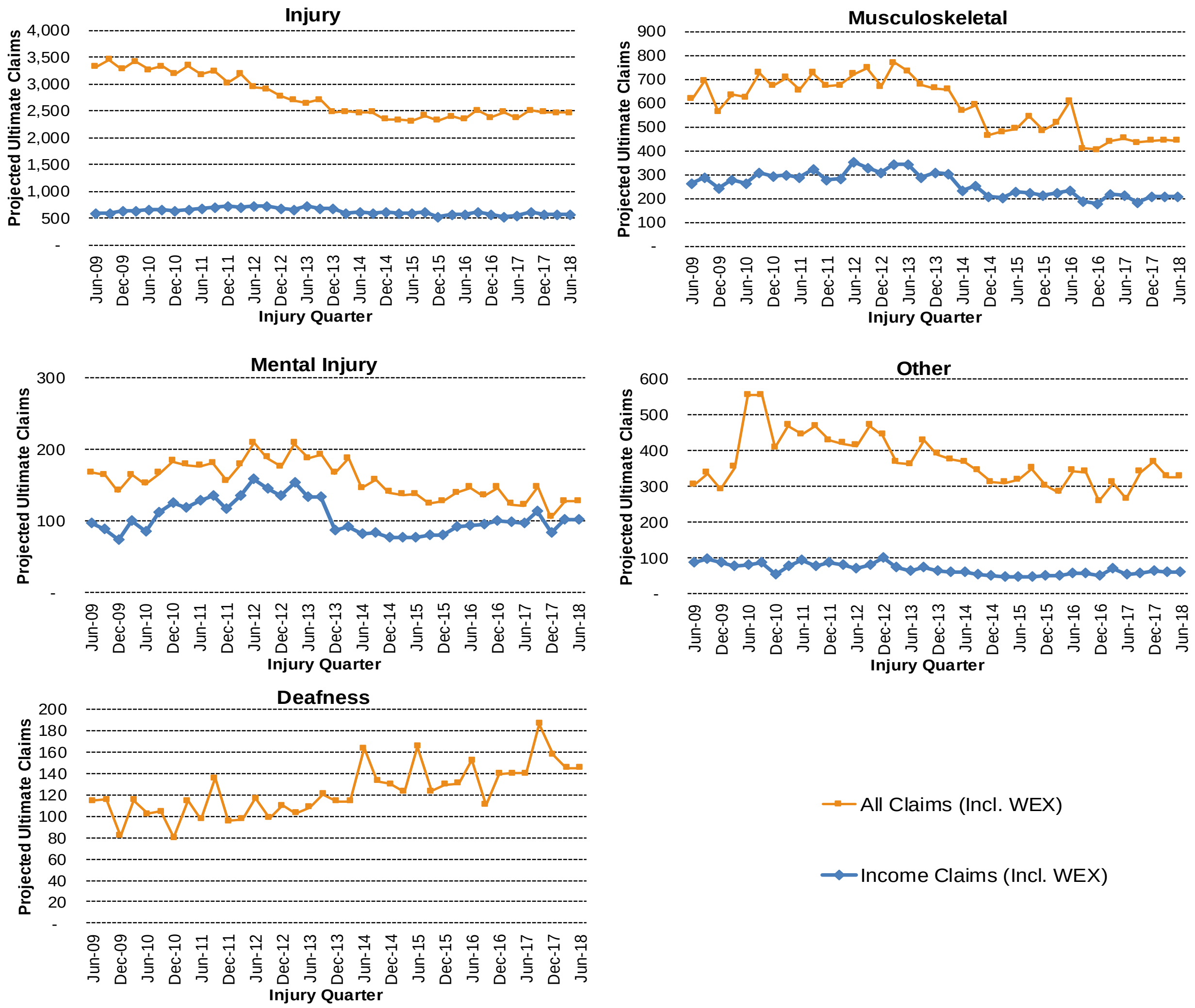
Figure 4.2 shows:

- Prior to 2007 IS claim numbers were reasonably stable, at around 5,200 claims per annum.
- IS claim numbers dropped by 17% between 2006 and 2010, and then rose again over the next two years to reach around 5,000 claims per annum in 2012 and 2013
- Our current projection shows IS claim numbers are expected to reduce materially in 2014 and again in 2015 (a 13% reduction each year). Our projection of IS claims for accident years 2015 and later show the numbers stabilising at below 4,000 (3,703 for 2017 and 3,795 for 2018), which is at the lowest level since the scheme commenced.
- The 2018 estimate of IS claim numbers is 2.5% higher than 2017.

As shown in the graph, considerable development of claim numbers is still expected for the latest accident year, and there is therefore significant uncertainty around the ultimate outcomes in 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 the numbers that reach 10 days' lost time (IS claims).

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

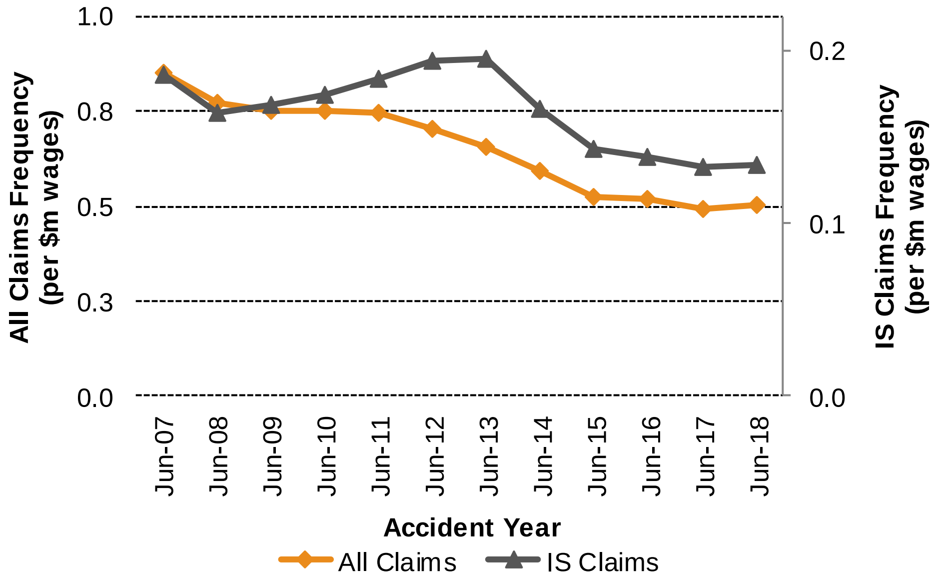


The most notable change in IS claim numbers has been the decrease in mental injury and musculoskeletal claims from 2013 to 2014. Mental injury IS claims have since risen slightly and stabilised at around 100 ultimate claims per accident quarter; the latest observations are higher than this, but it often takes six months for injury coding to be locked in and it is possible that the last two data points will be revised. This mix has important implications for long term IS claim costs, as mental injury claims tend to have longer average durations than the 'typical' IS claim.

4.1.3 Claims 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) and (2) IS claim frequency (IS numbers from 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 between 2007 and 2009, before diverging between 2010 and 2013. After the improvement in the IS claim frequency between 2013 and 2015, the trends in IS claim and all claims frequencies have been in line again. Both measures have flattened off in the last four years, but the 2018 year is emerging higher than 2017 for both IS and all claims frequencies.

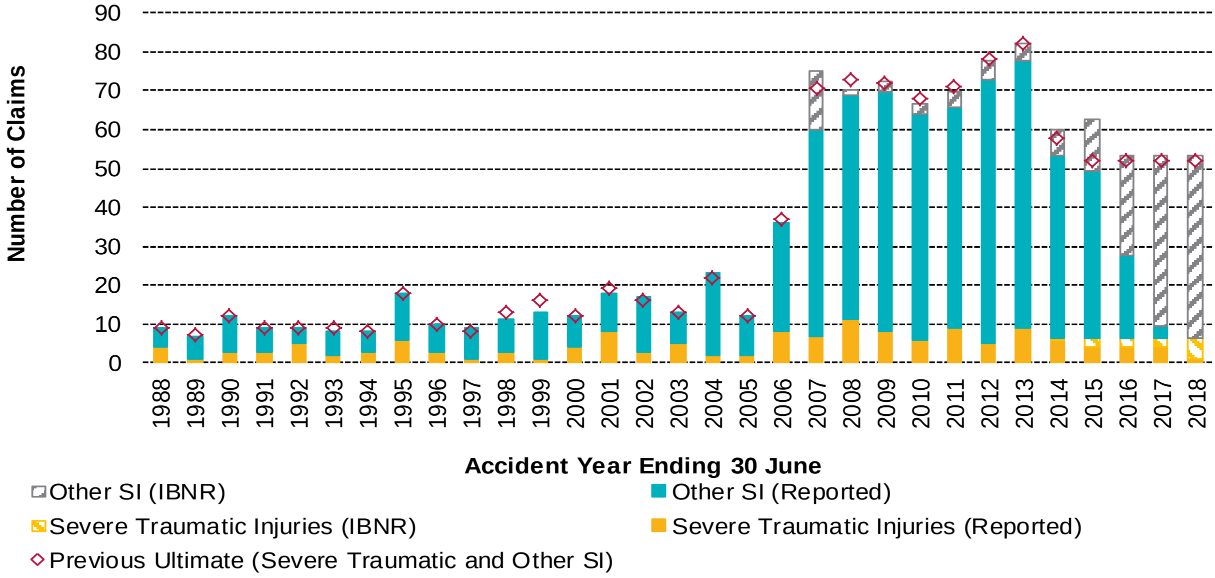
4.2 Serious Injury Claims

As discussed in Section 3.2.1, higher than expected numbers of new Serious Injury claims have been identified over the last 6-12 months for transitional claims. At the previous valuation, the majority of our IBNR allowance for these periods was an explicit allowance based on numbers of open Serious Injury application disputes and Serious Injury applications without a final decision made.

Many of the new Serious Injury claims in the last six months emerged from areas other than those considered in our previous IBNR allowance. In response, we have worked with ReturnToWorkSA to identify further sources of information that can be used to identify the potential for claims to be recognised as Serious Injury claims. We are now using a much broader 'pool' of claims to estimate our IBNR allowance, which has resulted in an increase in our estimates of ultimate claim numbers.

Figure 4.5 shows our estimated numbers of Serious Injury claims by accident year.

Figure 4.5 – 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 accident years 2007-2013, there has been little change in our estimates of ultimate claim numbers since the previous valuation – new claims have generally been offset by the removal of some 'potential' Serious Injury claims. The removal of claims from the 'potential' Serious Injury cohort is the result of manual claim reviews by ReturnToWorkSA; this is not likely to be a source of further reduction, as the group of remaining claims from these periods is small. However, the late identification of new Serious Injury claims is expected to continue as there are still many Serious Injury application disputes, Serious Injury applications, WPI assessments and WPI disputes for this group. This period has a higher level of ultimate Serious Injury numbers, which is partially linked to 'top up' claims that are no longer allowed under the RTW Act, and claimant and legal behaviour in the Scheme during this period.
- For 2014 and 2015, our projected ultimate numbers have increased as a result of new claims identified in the past six months and the associated increase in IBNR, although the numbers are still lower than 2007-2013 due to lower 'topping up'. There is still considerable uncertainty in the ultimate number of claims for this group.
- For RTW Act claims, there has been only a minor increase to our estimates of ultimate Serious Injury claims: we have increased the number of Other Serious Injury claims by 2 per year, while reducing the estimated number of Severe Traumatic Injuries by 0.5 per year. Our revised ultimate for RTW Act claims is 53.5 claims per annum, of which 6.5 are Severe Traumatic injuries.

Overall we have allowed for 185 IBNR claims in our projections, which equates to 3.5 injury years' worth of claims.

Although we are three years into the RTW Act, the slower than anticipated emergence of Serious Injury claims means there is still considerable uncertainty surrounding ultimate claim numbers for the 2014 and 2015 accident years and for RTW Act periods. Our approach to estimating IBNR for 2014 and 2015 is an explicit allowance based on the likelihood of claims becoming Serious Injury where a Serious Injury application or WPI activity has been initiated. This comprises a large group of claims, and for some segments only a small proportion are assumed to reach the Serious Injury threshold. Therefore, it would only take a small deviation from the assumed 'conversion rate' to materially impact the ultimate numbers of claims for these years – as an example of this sensitivity, we observe that the IBNR allowance from transition claims (55 claims) is only 4% of the number of open transition disputes (1,500).

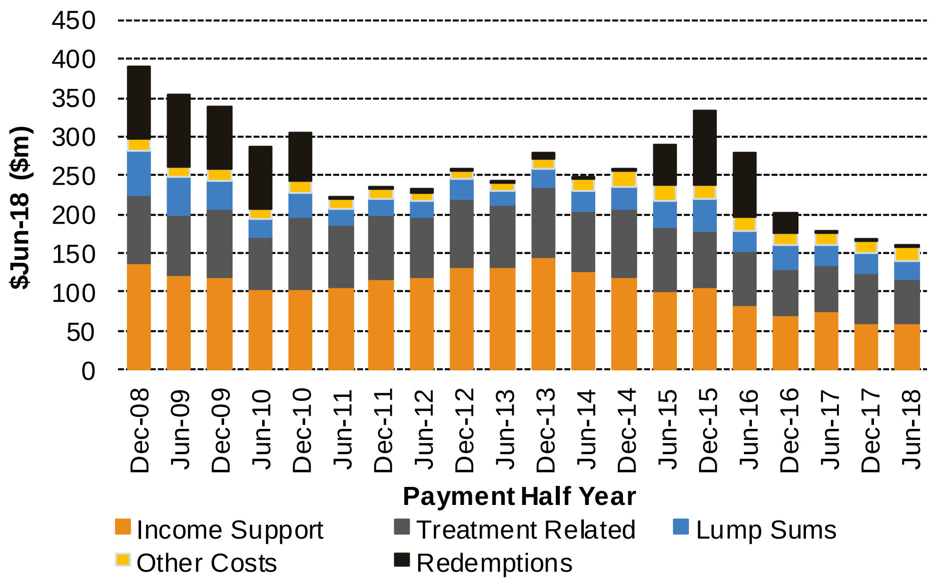
For RTW Act periods, our current ultimate assumption of 53.5 claims per year represents a reduction of 8 claims from 2014 and 2015. While we still believe it is appropriate to assume there will be some level of reduction from transition period claim numbers (due to features such as additional rigour around Serious Injury applications as ReturnToWorkSA and agents become more familiar with the process, reduced legal involvement on RTW Act claims and the impact of the new claims management model), there is as yet no direct evidence to base this on. This uncertainty is heightened in the context of the remaining levels of IBNR for 2014 and 2015.

As discussed in Section 3.1, a number of adverse legal decisions that are currently subject to appeal, and if these are not overturned they could lead to more claims getting higher WPI scores. This has the potential 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 4.6 shows gross claim payments (before recoveries) in half-yearly periods over the last ten years, inflated to current values.

Figure 4.6 - Gross Claim Payments ($Jun18)



Gross payments of $157 million in the last six months were 6% lower in real terms than the previous period. This reflects some mixed experience by payment type:

- IS payments have been stable in the last six months, after steadily reducing since 2013
- Treatment related costs reduced by around 12%, largely due to reductions in vocational rehabilitation spend
- Lump sum payments have been relatively low over the last 30 months. As discussed in Section 3.3.1, we expect lump sums to increase under the RTW Act provisions at some point

- Redemption activity has now essentially ceased under the RTW Act.

After allowing for recoveries of $5 million in the last six months, net claim payments of $151 million were $36 million (19%) lower than projected at the previous valuation. Table 4.1 shows the breakdown.

Table 4.1 - Payments: Actual vs Expected

Entitlement	Six Months to Jun-18				Split by Category	
Group	Actual	Expected	Act - Exp	Act/Exp	Short Term	Serious Inj
	$m	$m	$m		$m	$m
Income support	59.6	60.8	-1.1	98%	-1.0	-0.1
Redemptions	0.4	0.1	0.3	319%	-0.1	0.4
Lump sums	22.5	54.8	-32.3	41%	-19.9	-12.4
Worker legal	6.4	5.3	1.1	121%	0.9	0.2
Corporation legal	9.5	9.5	-0.1	99%	0.1	-0.2
Medical	29.7	29.2	0.5	102%	1.8	-1.3
Hospital	7.6	8.1	-0.6	93%	-0.1	-0.4
Travel	2.8	2.8	0.0	102%	-0.1	0.1
Rehabilitation	5.3	7.9	-2.6	67%	-2.4	-0.3
Physical therapy	4.4	4.6	-0.2	95%	-0.2	-0.1
Investigation	0.9	0.9	0.0	99%	0.0	0.0
Other	6.9	7.9	-1.1	87%	-0.7	-0.4
Common law	0.0	0.2	-0.2	0%	-0.2	0.0
LOEC	0.1	0.1	0.0	100%	0.0	0.0
Commutation	0.7	0.2	0.5	292%	0.5	0.0
Gross Payments	156.8	192.6	-35.8	81%	-21.4	-14.4
Recoveries	-5.4	-5.8	0.3	94%	-1.6	1.9
Net Payments	151.3	186.8	-35.5	81%	-23.0	-12.5

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

- IS payments were $1 million (2%) lower than expected; this was driven by accident years 2016 and prior, where the number of active claims has been lower than expected.
- Lump sum payments were materially lower than expected in the last six months (only 41% of expected), explaining most of the $36 million difference in payments; these were discussed in Section 3.3.1.
- Legal payments remain at relatively high levels, and were higher than projected due to the high dispute activity currently in the scheme, as explained in Section 3.3.2
- Treatment costs tended to be lower than expected with higher Medical costs offset by lower Rehabilitation, Other and Hospital costs.

Our valuation basis for STC is discussed in the following sections: IS 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. There has been no IS or MED redemption activity in the six months since December 2017, and no future redemptions are anticipated.

There is still some medical-only redemption activity, and the associated liability is discussed in Section 7.3. The results in Section 5.5 include both IS payments and medical-only redemptions.

5.1 Summary of Results

Table 5.1 summarises the movements in our liability estimates for IS payments since the December 2017 valuation.

Table 5.1 – Valuation Results: Income Support

Dec-17 Valuation	$m	$m	$m
Estimated Liab at Dec-17	122.8		
Projected Liab at Jun-18	122.2		
Jun-18 Valuation		AvE pmts	Actl Release
Impact of experience/OSC - valuation release	(2.8)	(1.0)	3.9
Estimated Liab at Jun-18 (Dec-17 eco assumptions)	**119.3**		
Impact of change in eco assumptions	0.3		
Estimated Liab at Jun-18 (Jun-18 eco assumptions)	**119.6**		

At June 2018 there is an actuarial release of $3.9 million, reflecting the claims experience since December 2017 and our valuation response. The actuarial release comprises a release of $2.8 million from the liability estimate and lower than expected claim payments in the six months (by $1.0 million).

The impact of economic assumptions is negligible for the STC IS payments; the impact of economic assumptions is 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 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 5.2 - Actual vs Expected Payments: IS

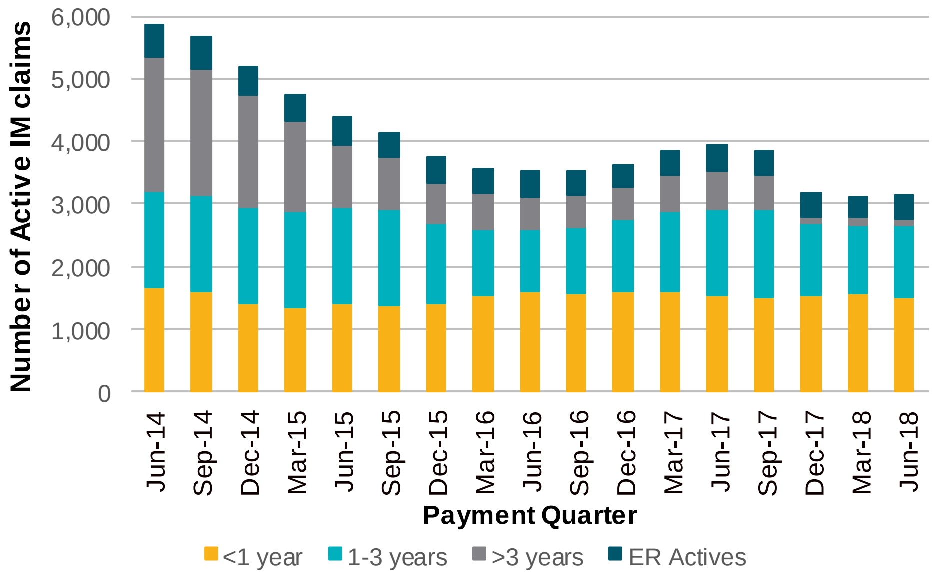
Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.3	0.4	(0.1)	78%
2005/06 - 2013/14	1.4	1.6	(0.1)	93%
2014/15 - 2015/16	6.8	8.2	(1.4)	83%
2016/17	19.2	18.8	0.4	102%
2017/18	22.5	22.3	0.2	101%
Total	50.2	51.3	(1.0)	98%

IS payments were around 15% lower than expected across the accident periods up to 2015/16, accident year 2016/17 was 2% higher than expected and accident year 2017/18 was 1% higher than expected.

5.2.2 Active Claims and Exits

Figure 5.1 shows the numbers of (quarterly) active IS claims, by duration, over the last three years.

Figure 5.1 – Numbers of Active IS Claims



Active claim numbers have fallen by around 40% since late 2014, as a result of the impacts of the RTW Act and ReturnToWorkSA's claim management strategies. During calendar year 2016, medium-duration actives (1-3 years) were low as many transitional claims exited the scheme 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 after which active claim numbers have 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.

In Table 5.3 we compare the numbers of active IS claims at June 2018 with our December 2017 valuation projection. This has been done only for periods where we projected future active claims at the December 2017 valuation (accident years 2015/16 and later).

Table 5.3 – AvE Active Claims

Accident Year	Proj from Dec-17 Val	Actual Actives	Act *less* Proj	Diff as % Proj
Jun-16	296	279	-17	-6%
Jun-17	835	872	37	4%
Jun-18	1,519	1,506	-13	-1%
Total	2,650	2,657	7	0%

[1] Twelve months to 30 Jun 18

Overall, active claim numbers at June 2018 for these accident periods were as expected, with more actives in the second year post injury and less in the later period. At this early stage, the 2017/18 numbers are lower than expected in total, but the experience for this year (and particularly the latest quarter) is very immature.

5.3 Modelling of STC IS Payments

Our modelling approach for IS payments includes:

- **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, 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**, once again valuing all IS entitlements together. This PPCI model uses total claim numbers (not just IS claims) as the base.

This is unchanged from our December 2017 valuation.

5.4 Valuation Basis

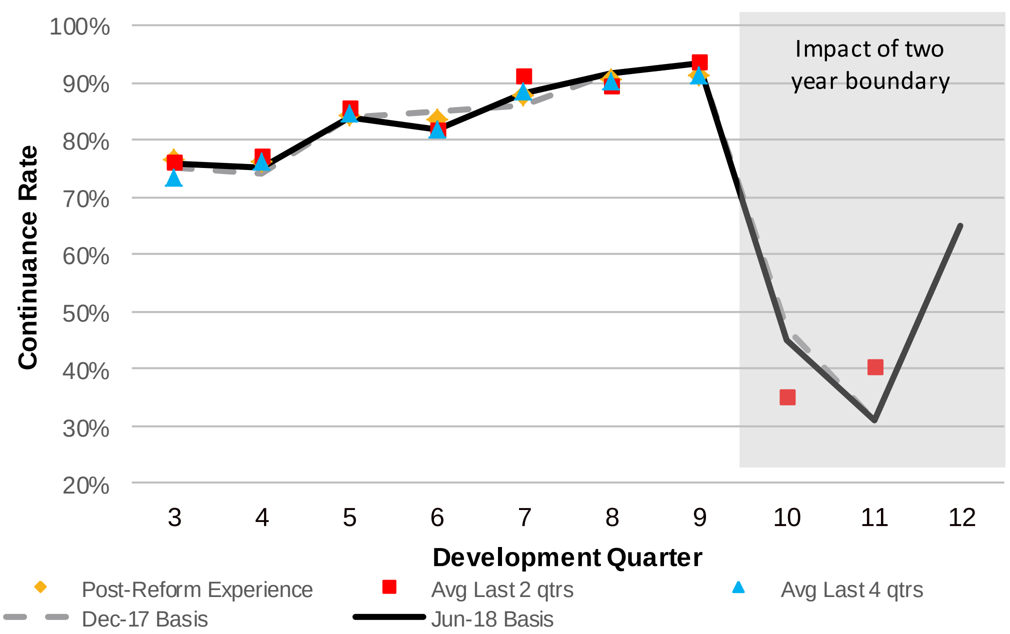
5.4.1 IS Payments in Years 1-3: PPAC Model

Claims from post-30 June 2015 accidents have been managed under the RTW Act since their inception. The PPAC basis for these claims is being updated at each valuation as further post-RTW Act experience emerges.

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

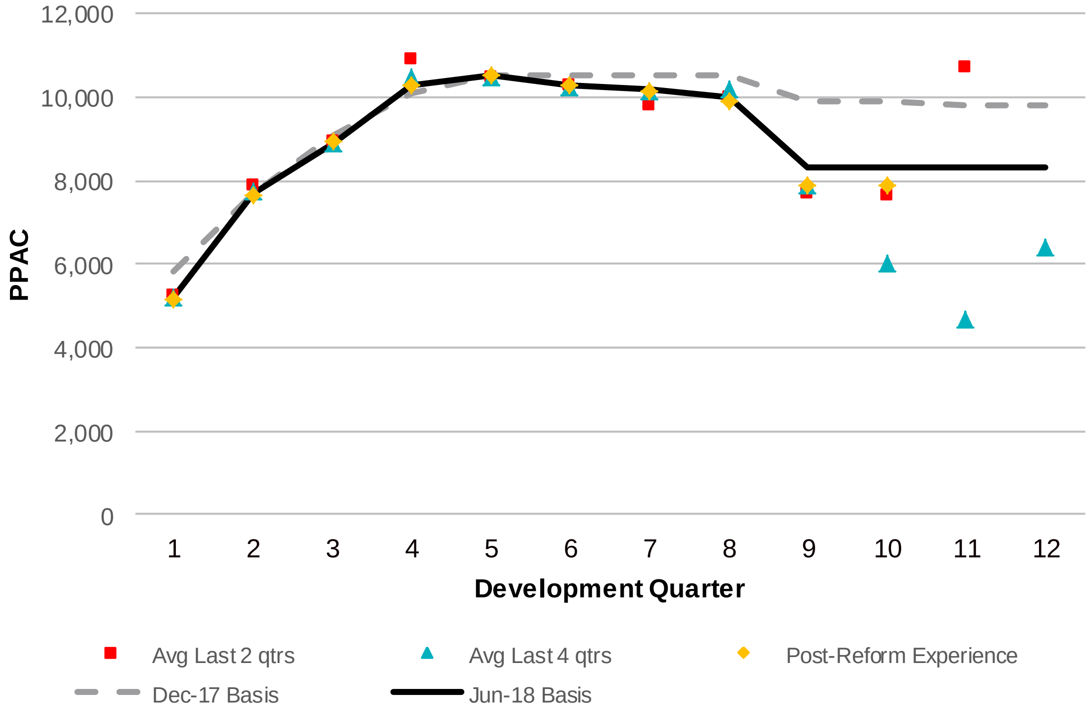


We have made minor adjustments to continuance rates, specifically in the second year post injury which is slightly lower than previously. All else equal, the impact of the changes to continuance rates is an increase in the estimated liability. We note that the post-reform experience from DQ 9 onwards is very immature and we have not shown the experience beyond DQ9, although it is emerging similar to expectations.

Payments per Active Claim

Figure 5.3 below shows the recent PPAC experience relating to post-reform claims, and our adopted bases at the previous and current valuations.

Figure 5.3 - Payments per Active Claim



The most recent PPAC experience is emerging lower than our December 2017 basis, reflecting improved return to work outcomes. We have reduced our adopted PPACs, particularly after the first development year. The overall impact of the changes to average claim size is a decrease in the estimated liability.

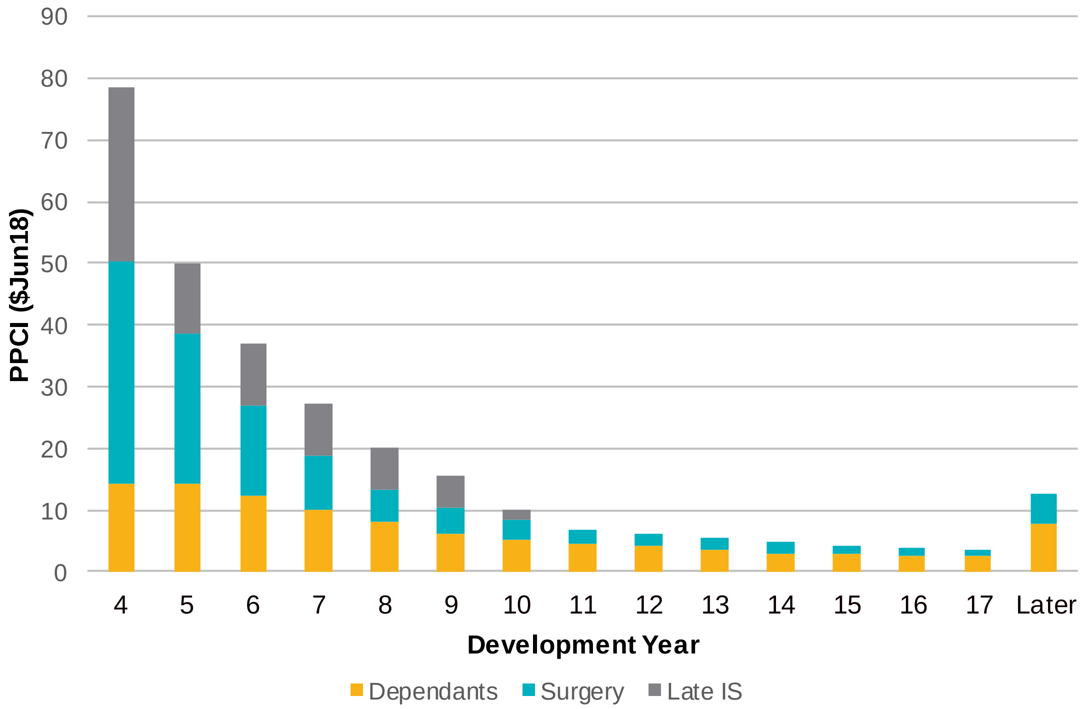
5.4.2 IS Payments after Year 3: PPCI Model

The overall adopted average PPCI size of about $285 per reported claim is made up of three components:

- The allowance for ongoing dependant claim benefits, which remains unchanged at around $100 per reported claim
- The PPCI for post-surgery IS payments is also unchanged at around $115 per reported claim
- An allowance for claims with 'late starting incapacity' of about $70 per reported claim. It allows for about 5-10 claims per accident quarter to commence IS payments after the two-year mark, and to receive about one year's IS benefits on average.

These assumptions are unchanged, except for inflation, since the previous valuation. Figure 5.4 shows the adopted PPCI basis and its components.

Figure 5.4 – 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: IS and Medical Redemptions

Release (strengthening) due to		
	$m	$m
AvE payments in six months		1.0
Difference from projected liability		
Experience	(2.1)	
IS Basis	5.0	
		2.8
Total		3.9

The actuarial release of $3.9 million is made up of payments in the six months being $1.0 million lower than expected, and a $2.8 million reduction in the projected liability from December 2017, composed of the following changes:

- A $2.1 million increase due to the IS active claim numbers being higher than expected
- A $5.0 million decrease due to the scheme's improved return to work experience being reflected in the adopted average payments.

Table 5.5 summarises these movements by accident period. The results on accident periods two to three years post injury drive the saving, showing the scheme's continued RTW improvements.

Table 5.5 - Actuarial Release for Income Support

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumps	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	2.8	2.8	(0.0)	(0.1)	0.1	4%
2005/06 - 2014/15	12.3	12.1	(0.1)	(0.1)	0.2	2%
2015/16 - 2016/17	8.8	8.2	(0.6)	(1.4)	1.9	22%
2016/17 - 2017/18	98.2	96.1	(2.1)	0.5	1.6	2%
Total	122.2	119.3	(2.8)	(1.0)	3.9	3%

6 Lump Sums – Short Term Claims

This section describes our valuation of lump sum payments for Short Term Claims. A lump sum is payable to a worker who suffers a compensable disability that results in at least 5% whole person permanent 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
- "Deafness" claims
- "First Paid" lump sums – where a claimant receives their first lump sum payment for the relevant claim (excluding Death and Deafness 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 Deafness 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 December 2017 valuation.

Table 6.1 – Valuation Results: Lump Sums

Dec17 Valuation	$m	$m	$m
Estimated Liab at Dec-17	228.6		
Projected Liab at Jun-18	231.5		
Jun-18 Valuation		AvE pmts	Release
Impact of experience/OSC - Movement in liab	20.2	(19.9)	(0.3)
Estimated Liab at Jun-18 (Dec-17 eco assumptions)	**251.6**		
Impact of change in eco assumptions	1.1		
Estimated Liab at Jun-18 (Jun-18 eco assumptions)	**252.8**		

The June 2018 liability shows an actuarial strengthening of $0.3 million since December 2017, reflecting an increase of $20.2 million in the liability, and $19.9 million of lower claims payments – this reflects our view that the lower payments are largely due to a slowdown, as opposed to a reduction in claims eligible for a lump sum. 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 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 6.2 – Actual vs Expected Payments: Lump Sums

Accident Period	Payments in Six Months to Jun 18 Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.5	0.6	(0.1)	83%
2005/06 - 2012/13	2.3	2.9	(0.6)	80%
2013/14 - 2014/15	4.1	8.5	(4.4)	49%
2015/16 - 2017/18	12.6	27.4	(14.9)	46%
Total	19.5	39.4	(19.9)	50%

Payments were around 50% lower than expected in the six months to 30 June 2018. This was driven by a significantly lower than expected number of First Paid lump sums across 2013/14 and later accident periods. Economic Loss lump sum payments have also been slow to emerge for RTW Act accidents. The recent payment experience reflects the slowdown in the WPI assessment process over the last year and the current backlog of assessments as discussed in Section 3.3.1.

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. Table 6.3 below compares the actual and expected number of First Paid lump sums paid in the six months to June 2018.

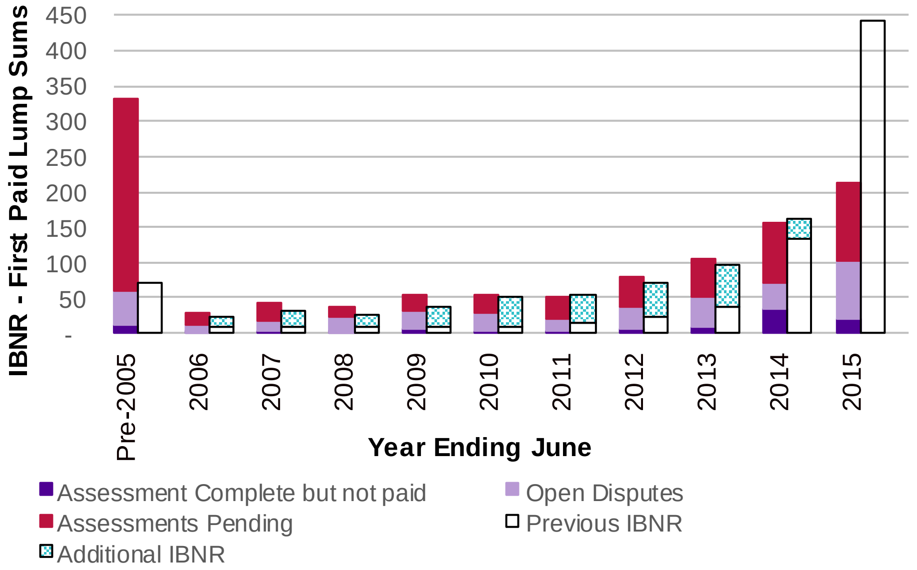
Table 6.3 – Actual vs Expected Payments: First Paid Lump Sums

Accident Period	Number of Payments in Six Months to Jun 18 Actual	Expected	Act - Exp	Act/Exp
To 30 Jun 05	14	3	11	458%
2005/06 - 2012/13	68	30	38	229%
2013/14 - 2014/15	129	284	-155	45%
2015/16 - 2017/18	154	364	-210	42%
Total	365	681	-316	54%

Payments for accident years up to 2012/13 were higher than expected, particularly for accidents older than 10 years. This is the third consecutive valuation where we have observed more first paid lump sums in old periods.

At this valuation, we have reviewed our IBNR allowance for accident periods up to 2012/13, which are initially based on a chain ladder approach. There are a large number of pending WPI assessments for transitional claims, and in addition, there is also a high number of open disputes related to WPI and lump sum compensability. Figure 6.1 below compares the number of in-progress WPI assessments, open disputes relating to WPI and lump sum, and pending lump sum payments (left-side bar) with the IBNR allowance for First Paid lump sums (right-side bar).

Figure 6.1 – Comparison of Potential Future Lump Sum Claims and Model IBNR Allowance (Transitional Claims only)



The above figure shows:

- Pre-2005 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 15% of pending assessments to be successful.
- For accident years 2006 to 2014 there are a large number of claims with pending WPI assessments or open disputes, and we have added an additional IBNR allowance at this valuation to reflect this. In total, we have added around 300 additional lump sum payments to our previous IBNR basis. This allows for around 50% of open disputes and 75% of pending assessments to receive a lump sum.

For periods after December 2013 we adopt a frequency based approach. We have reduced our selected ultimate numbers for RTW Act claims to around 1,080 per annum, down from 1,100 at the previous valuation. The reduction reflects the declining ultimate number of First Paid lump sums since 2008 and our revised level of projected ultimate lump sums for the 2014 accident year.

Figure 6.2 shows the ultimate number of First Paid lump sums, split into paid and IBNR claims. This shows that we are anticipating a slow rate of reduction in lump sum claim numbers over time.

Figure 6.2 – Ultimate Number of First Paid Lump Sums

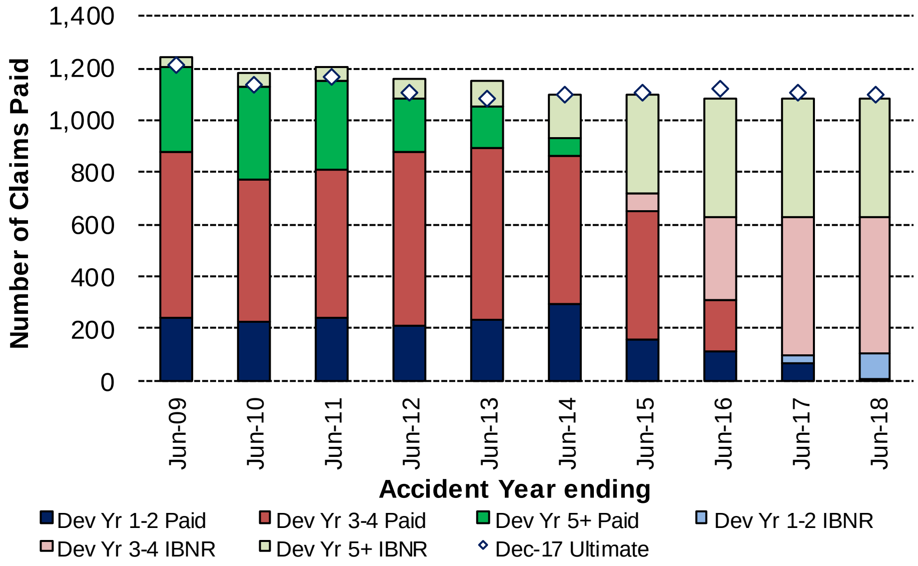
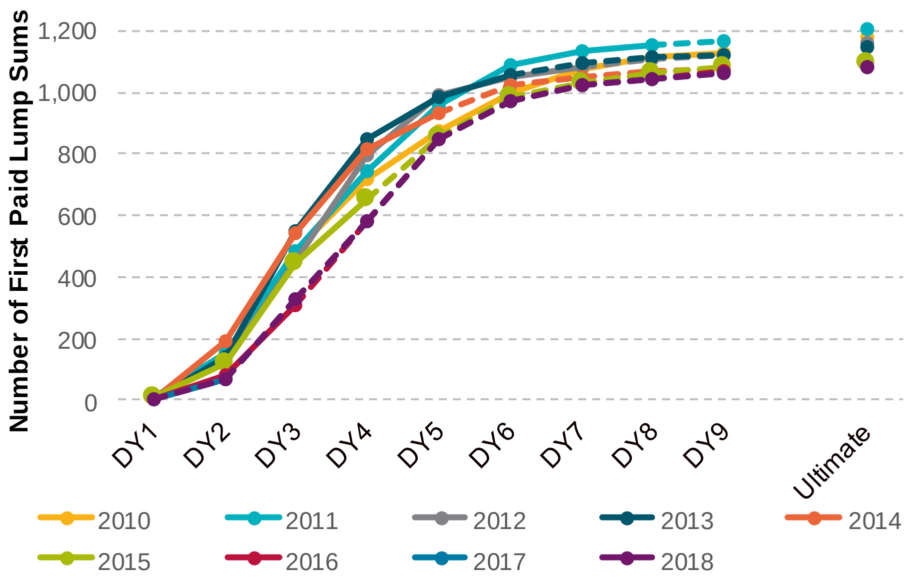


Figure 6.5 shows the cumulative number of First Paid lump sums by development year for accident years 2010 to 2018. The dotted line represents the projected development based on our selected payment pattern.

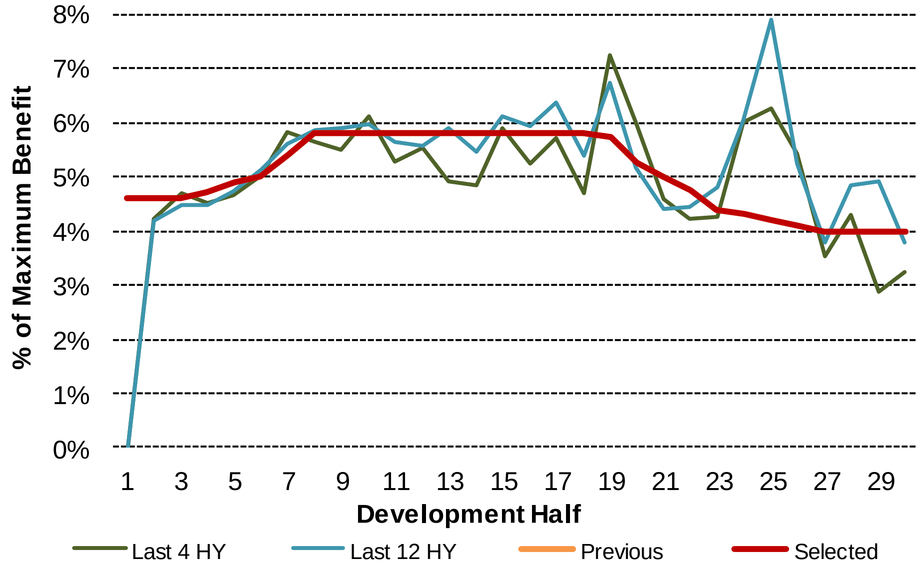
Figure 6.3 – First Paid Lump Sums Development



WPI assessments, and consequently lump sum payments, have been materially slower to emerge than expected and we anticipate it will take another one to two years before the WPI assessment process can speed up and get to the level originally expected for claims under the RTW Act. In fact, as Figure 6.3 shows, lump sum payments for RTW Act periods (2016 and 2017) are currently sitting below prior years. At this valuation, we have slowed down the payment pattern up to development year 5 in line with the emerging experience.

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)



Our selected size assumptions are unchanged at this valuation and is in line with the long-term experience; given numbers have been so much lower than expected, we are treating the lower recent size with some caution. At an overall level, the average First Paid lump sum is expected to be 5.3% of the prescribed maximum benefit, or around $25,000.

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).

Top Up lump sums payments were significantly lower than expected in the last six months across all accident periods. We have interpreted this as a slowdown in payments due to the current slowdown in the WPI assessment process. At the current valuation, we have increased our Top Up lump sums allowance to around 165 payments, up from 142 in our previous basis. Our selected basis reflects the latest number of pending and approved Top Up applications, with a small allowance for extra claims to emerge from disputed applications. While there is uncertainty around the success rate of the current applications and the lump sum payments, the dollars are not large.

Figure 6.5 shows the projected ultimate numbers of Top Up lump sums, split into paid and IBNR claims. The totals reduce for more recent accident years, as there is only a limited opportunity for these claims to have made applications for subsequent assessments prior to 30 June 2016 in line with the Regulations.

Figure 6.5 – Ultimate Number of Top Up Lump Sum Claims

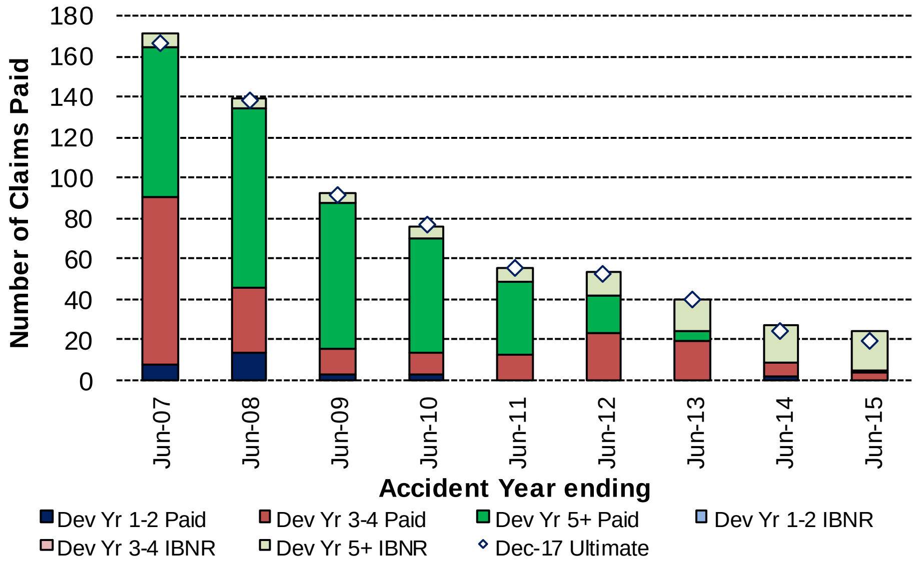
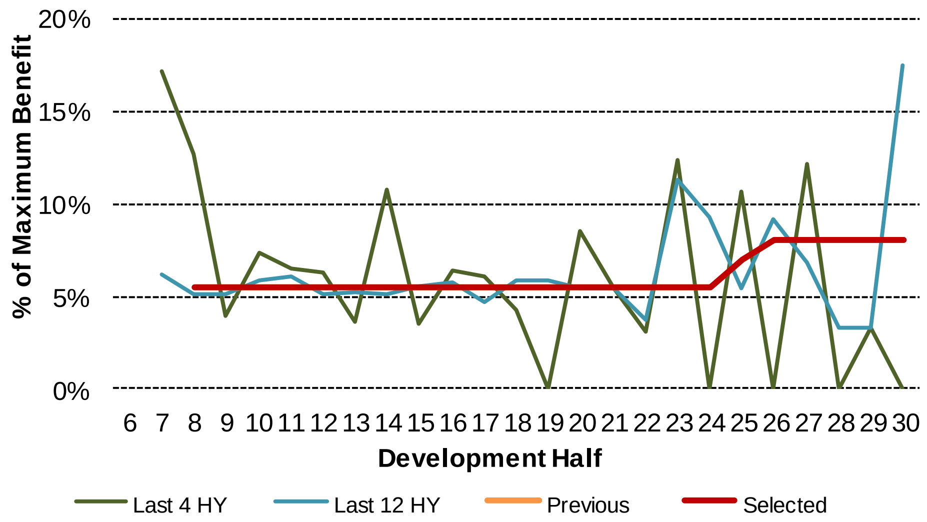


Figure 6.6 shows the average size of Top Up lump sum payments as a percentage of the maximum benefit available.

Figure 6.6 – Top Up Lump Sum Size by Development Half-Year (as a percentage of the maximum benefit)

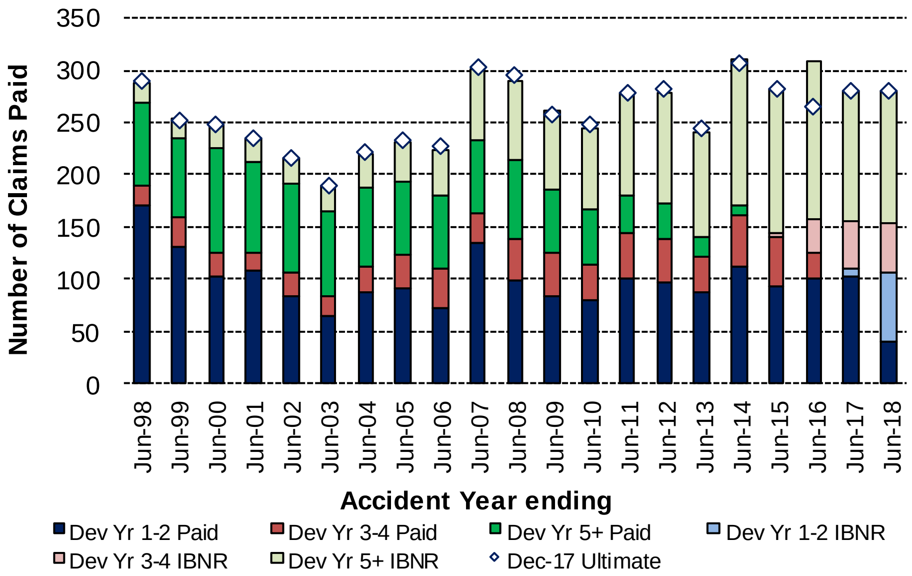


Our selected average size is unchanged from the previous valuation and is consistent with the long term experience, given the experience is volatile.

Valuation Basis for Deafness Lump Sums

When estimating the number of future Deafness lump sums, there is no differentiation between First Paid and Top Ups. Figure 6.7 shows the projected numbers of Deafness lump sums by accident year. The tail of Deafness IBNR claims is considerably longer than for First Paid lump sums, with claims still occurring many years after the injury (as is for common Deafness claims).

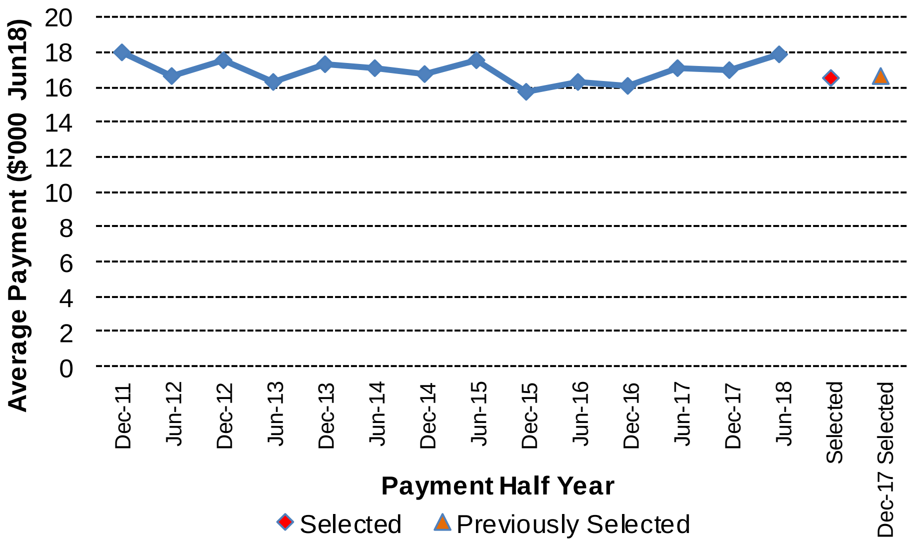
Figure 6.7 – Ultimate Number of Deafness Lump Sums



Deafness lump sum payments over the last six months were around 7% higher than expected driven by recent accident periods. We have maintained a frequency approach for accident periods after June 2016 to allow for changes in payment speeds, consistent with the “lumpy” nature of deafness lump sum payments. Our selected ultimates for these periods are unchanged and consistent with the long term experience. Periods prior to June 2016 adopt a chain ladder approach. We have slightly increased the development factors in the front-end to reflect the emerging experience.

Figure 6.8 shows the overall average benefit paid for a Deafness lump sum claim. The selected average Deafness benefit is unchanged at this valuation and is similar to the experience over the last three years at around $16,500.

Figure 6.8 – Average Lump Sum Deafness Payment



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 53% and 52% lower than expected respectively. Death lump sums experience tends to be volatile and at this valuation, we have maintained our underlying projection basis consistent with the longer term experience.

In addition to the underlying projection, our basis has allowed for one-off ex-gratia dependent benefit payments to occur in line with changes introduced with the RTW Act; these ex-gratia payments were available only to a small number of past part-death benefit recipients, but to date there has been very little activity and so we continue to reduce the IBNR allowance by one half-year to recognise that not all potentially entitled dependents will claim this benefit.

Figure 6.9 shows the numbers of Death lump sums by accident year.

Figure 6.9 – Ultimate Number of Death Lump Sums

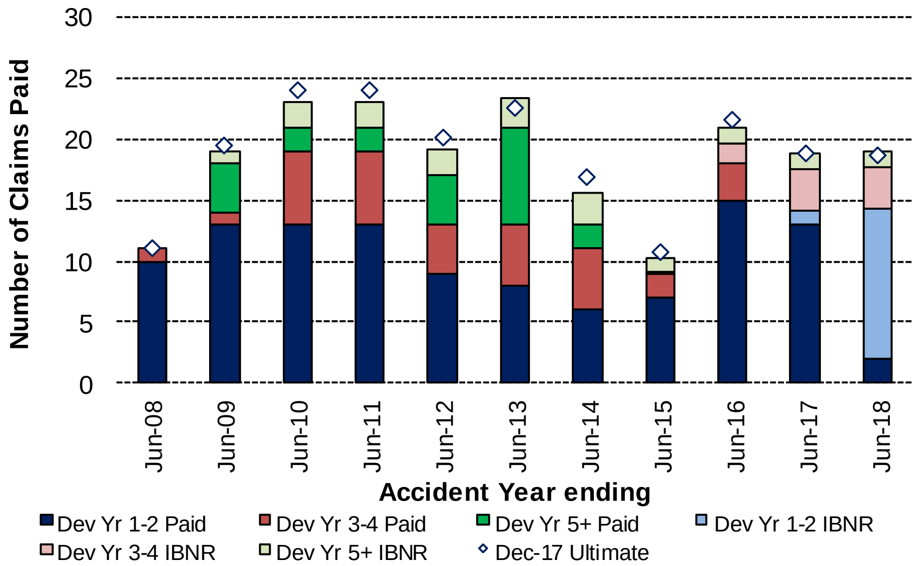
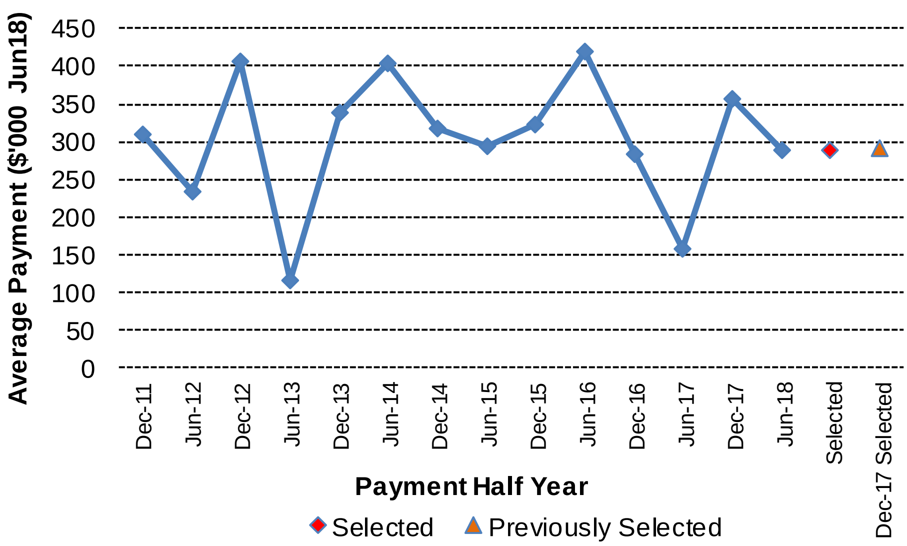


Figure 6.10 shows the average benefit paid to a Death lump sum claim, by payment half year.

Figure 6.10 – Average Lump Sum Death Payment



Our adopted size is unchanged and consistent with the long term average.

Valuation Basis for Economic Loss Lump Sums

Economic Loss lump sums are paid to a worker for loss of future earning capacity. This is a new benefit under the RTW Act and is available to injuries from 1 July 2015. 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. As with First Paid lump sums, we have reshaped the profile of payments at this valuation to allow for the slower than expected payments emerging in the experience. We will continue to monitor the experience as claims are paid and revise our assumptions as necessary.

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 December 2017 valuation.

Table 6.4 – Actuarial Release for Lump Sums

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	5.3	5.6	0.3	(0.1)	(0.2)	-4%
2005/06 - 2012/13	14.0	19.4	5.3	(0.6)	(4.8)	-34%
2013/14 - 2014/15	17.4	21.8	4.4	(4.4)	(0.0)	0%
2015/16 - 2017/18	194.8	204.9	10.1	(14.9)	4.7	2%
Total	231.5	251.6	20.2	(19.9)	(0.3)	0%

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

The $20.2 million increase in projected liability offsets payments being $19.9 million less than expected in the six months, resulting in an actuarial strengthening of $0.3 million. The higher allowance for First Paid lump sums in older accident periods is offset by a slower payment pattern and lower ultimates for RTW Act accidents.

Table 6.5 breaks down the actuarial release by source.

Table 6.5 – Components of Actuarial Release: Lump Sums

Release (strengthening) due to		
	$m	$m
AvE payments in six months		19.9
Changes to Valuation Basis		
First Paid and Eco Loss Numbers	(17.9)	
Slower Payment Pattern	(1.4)	
Top Up allowance	(0.6)	
Higher Deafness IBNR	(0.2)	
Subtotal		(20.2)
Total		(0.3)

Slower than expected payments in the six months to June 2018 contribute a saving of $19.9 million, which is offset by changes to the First Paid and Economic Loss lump sum numbers resulting in an increase of $17.9 million. This is the net impact of higher number of First Paid lump sums for transitional claims offset by lower numbers of First Paid and Economic Loss lump sums for RTW Act accidents.

Slower payments increases the average size marginally adding $1.4 million to the liability. Increases to the Top Up and Deafness lump sums add a further $0.8 million to the liability.

7 Treatment and Related Costs – Short Term Claims

Workers who suffer a compensable injury are entitled to be compensated 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 December 2017 valuation.

Table 7.1 - Valuation Results: Treatment Costs

	Medical	Hospital	Travel	Rehab	Physical Therapy	Other	Total Treatment
Dec17 Valuation	$m	$m	$m	$m	$m	$m	$m
Estimated Liab at Dec-17	104.0	17.6	4.5	16.6	6.7	10.2	159.6
Projected Liab at Jun-18	103.5	18.2	4.2	16.7	6.6	9.9	159.2
Jun-18 Valuation							
Impact of experience/OSC - Movement in liab	4.0	0.2	0.0	(3.0)	0.1	(0.4)	1.0
Estimated Liab at Jun-18 (Dec-17 eco assumptions)	**107.5**	**18.4**	**4.3**	**13.8**	**6.8**	**9.5**	**160.2**
Impact of change in eco assumptions	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.3)
Estimated Liab at Jun-18 (Jun-18 eco assumptions)	**107.3**	**18.4**	**4.3**	**13.7**	**6.8**	**9.4**	**159.9**
AvE Payments - six months to Jun-18	1.8	(0.1)	(0.1)	(2.4)	(0.2)	(0.7)	(1.7)
Actuarial Release at Jun-18	(5.7)	(0.1)	0.0	5.4	0.0	1.1	0.7

The main movements from our December 2017 projection of the June 2018 liability are:

- An increase of $1.0 million in the liability, reflecting the recent experience and valuation response. This produces an actuarial release of $0.7 million when combined with actual payments in the period being $1.7 million less than expected.
- Movements in economic assumptions, decreasing 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 two exceptions to this are payments for medical aids and appliances, and payments related to approved surgeries. Our modelling approach captures these features using:

- Long term 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 will commence on 1 July 2015 and so payments will generally cease soon after 30 June 2018. The "Transitional claims" selections shown in this section relate to our projections up to this date. The "RTW Act claims" selections are used for our payment projections past this date.

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

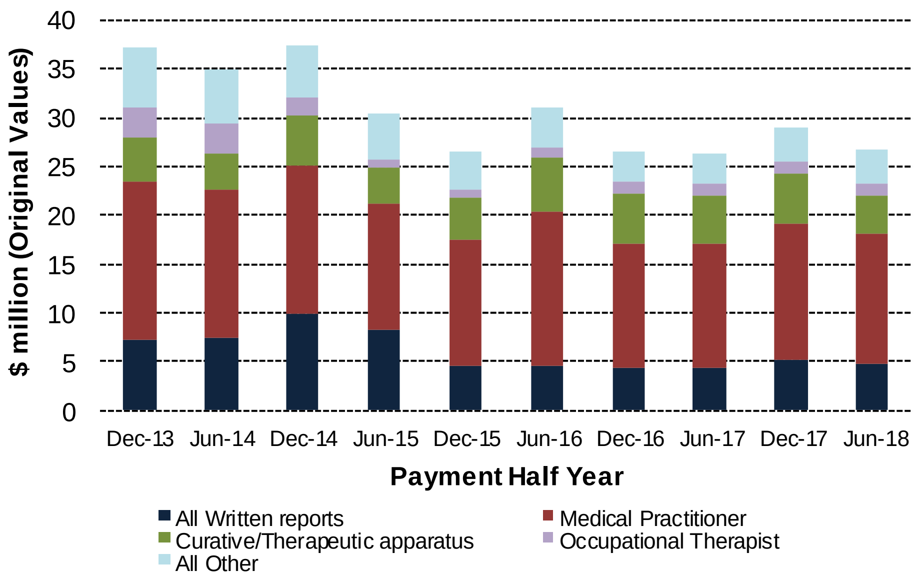
7.3 Medical

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 have reduced since December 2014 and remain lower compared to prior periods. The reduction is largely driven by:

- Lower written report activity post-June 2015 following the removal of WCA under the RTW Act.
- Lower other medical expenses including psychologist and chemist costs.
- Offset by higher medical apparatus costs.

Table 7.2 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 7.2 – Actual vs Expected Payments: Medical

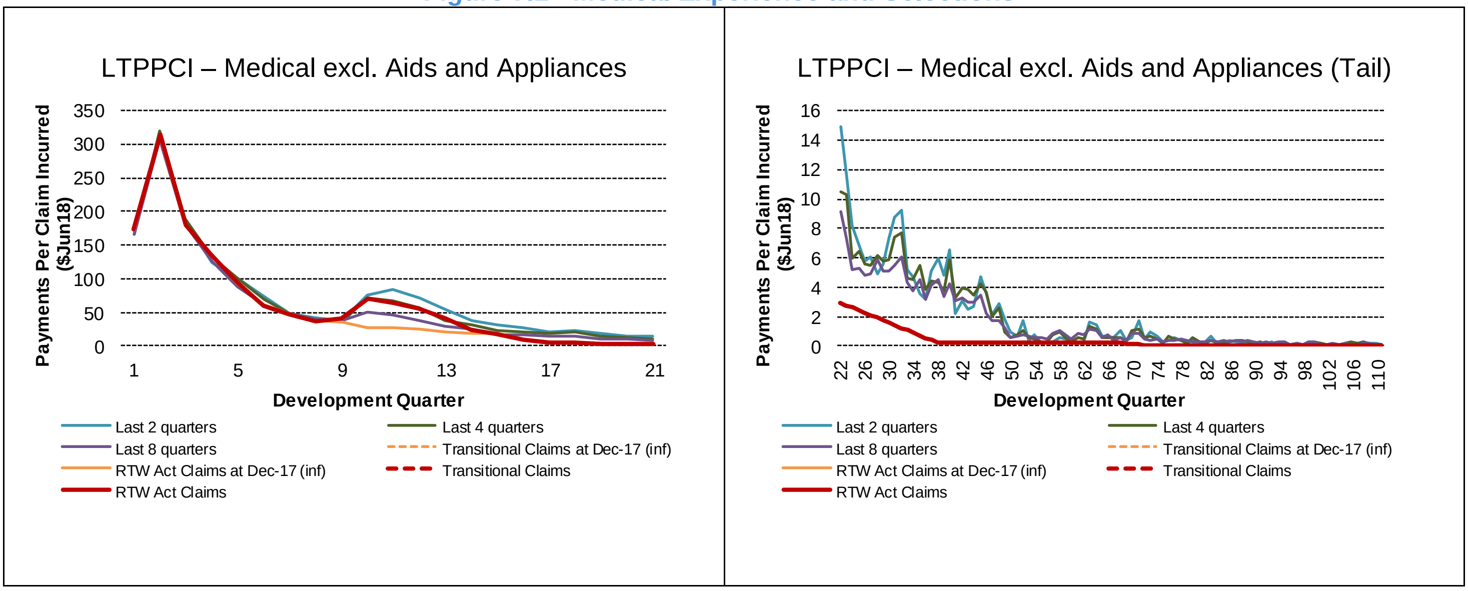
Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	1.0	1.6	(0.7)	59%
2005/06 - 2012/13	2.3	2.2	0.1	105%
2013/14 - 2014/15	2.1	1.4	0.6	143%
2015/16 - 2017/18	21.4	19.7	1.7	109%
Total	26.8	25.0	1.8	107%

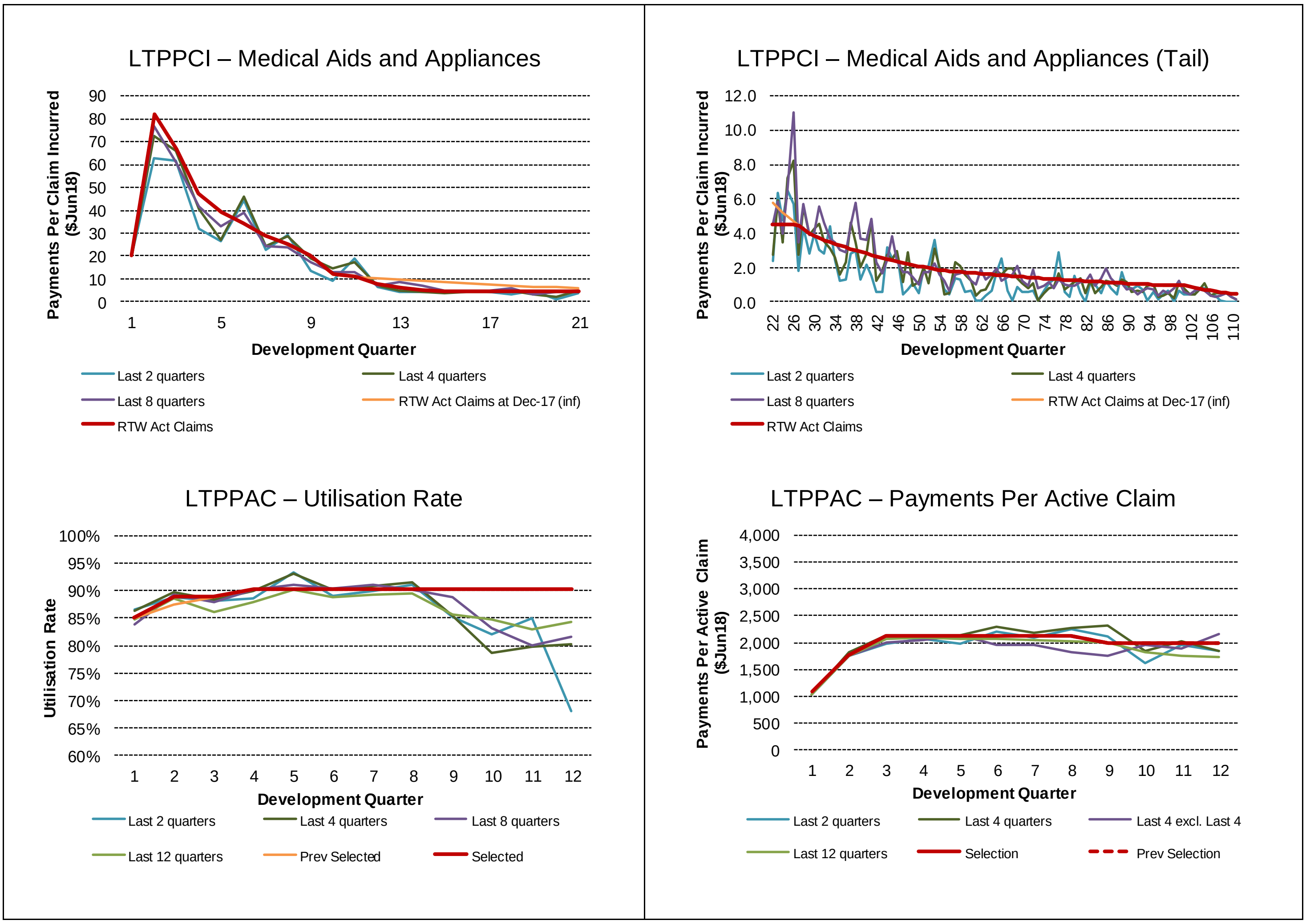
Overall, payments were higher than expected in the six months to June 2018. On a dollar basis this was driven predominately by post-reform accident periods, although payments were also higher in years back to 2006. The years immediately pre-reform had the highest percentage difference to what was expected. Higher payments in these older periods are driven by increases in medical reports linked to WPI assessment activity.

Valuation Basis

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

Figure 7.2 - Medical Experience and Selections





Our comments on the experience and selected assumptions are:

- LTPPCI (Medical, excluding aids and appliances):
  - We have reshaped our previous valuation basis for both transition claims and RTW Act claims to better reflect the recent payment experience. Experience is higher than our basis as a result of high levels of written report activity, which is a continuation of experience seen at December 2017 and we think is due to the slowdown in WPI assessments pushing these costs outside of the PPAC model. Due to the increasing trend in both transitional and RTW Act periods, we have made allowance for this to continue.
  - From 1 July 2015 the capping of benefits under the RTW Act commences, and our selected PPCIs reduce significantly by 4.5 years duration. We have increased our projection basis for post-reform accident quarters, up to the third year of development, in light of the recent higher than expected level of payments.
- LTPPCI (Medical aids and appliances)
  - We have used the same PPCI pattern for transitional claims and RTW Act claims.
  - We have reshaped our projection assumptions for both older and more recent accident periods in line with emerging payment patterns which are lower than expected.
- LTPPAC:

- We have marginally increased the utilisation pattern at earlier durations to reflect the higher proportion of claims receiving both IS and medical payments.
- Payments per active claim are unchanged.

- LTPPCI (late medical payments for claimants also receiving IS)
  - Payments have been projected at 20% of the level of late IS payments, this is unchanged from the previous valuation.

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 December 2017 valuation.

Table 7.3 – Actuarial Release for Medical

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	17.0	16.9	(0.1)	(0.7)	0.7	4%
2005/06 - 2012/13	23.2	23.0	(0.2)	0.1	0.1	0%
2013/14 - 2014/15	9.3	8.8	(0.5)	0.6	(0.1)	-1%
2015/16 - 2017/18	54.1	58.8	4.7	1.7	(6.4)	-12%
Total	103.5	107.5	4.0	1.8	(5.7)	-6%

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

The $4.0 million increase in the projected liability combined with actual payments being $1.8 million higher than expected results in an actuarial strengthening of $5.7 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		(1.8)
Changes to Valuation Basis		
IS active projection changes	(0.5)	
Ultimate claims	(0.1)	
PPCI Changes	(3.4)	
Total		(5.7)

The main drivers of change are:

- Higher Income Support actives increase the liability by $0.5 million.
- Higher ultimate claim numbers result in an actuarial increase of $0.1 million.
- Changes to PPCI assumptions for other medical payments have resulted in a $3.4 million increase in the liability, this is driven by higher medical report costs at later durations.

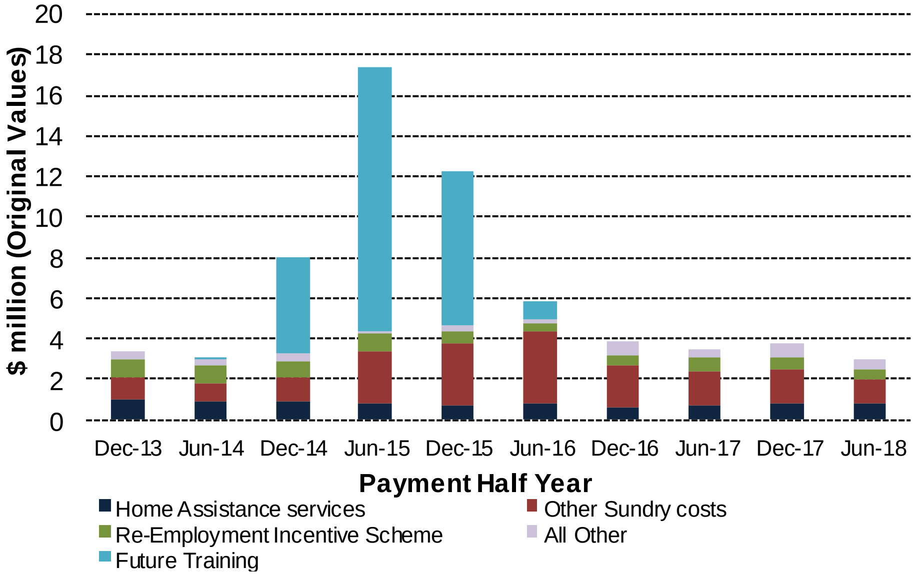
7.4 Other

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 stabilised in the last 2 years following reductions in Other Sundry Costs. 'Future training and education' benefits are no longer paid to workers.

Table 7.5 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 7.5 - Actual vs Expected Payments: Other

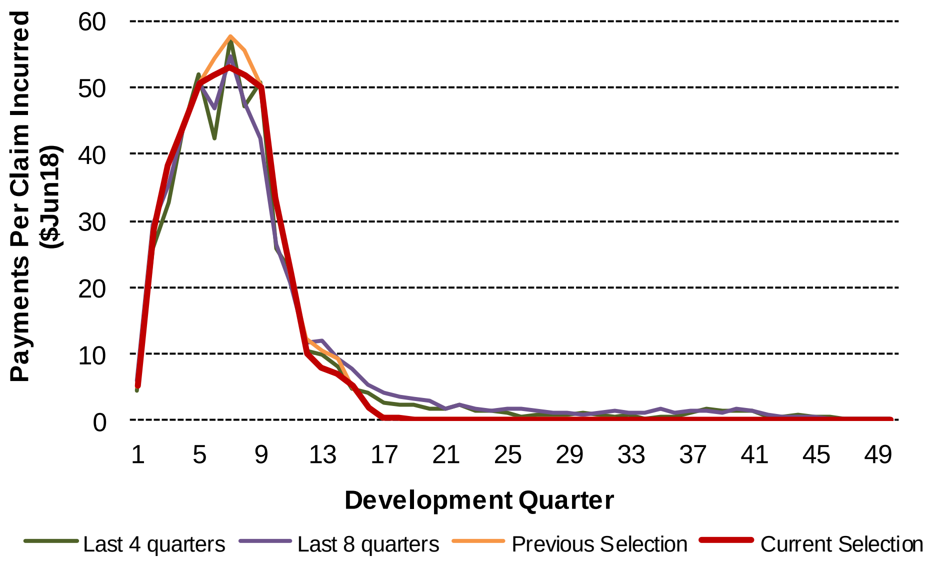
Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.1	0.0	0.1	315%
2005/06 - 2012/13	0.2	0.3	(0.1)	79%
2013/14 - 2014/15	0.2	0.4	(0.1)	58%
2015/16 - 2017/18	2.5	3.0	(0.5)	82%
Total	3.0	3.7	(0.7)	81%

Overall, payments were lower than expectations. This is largely driven by the RTW Act accident periods with some minor offsetting differences in older years.

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 decreased our front end PPCI assumptions in line with the recent level of payments observed for these accident periods. We have also decreased the PPCI slightly in year three post injury, and the assumptions are otherwise unchanged.

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 December 2017 valuation.

Table 7.6 - Actuarial Release for Other

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.1	(0.1)	0%
2005/06 - 2012/13	0.0	0.0	(0.0)	(0.1)	0.1	714%
2013/14 - 2014/15	0.1	0.1	(0.0)	(0.1)	0.2	138%
2015/16 - 2017/18	9.7	9.3	(0.4)	(0.5)	0.9	10%
Total	9.9	9.5	(0.4)	(0.7)	1.1	11%

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

The actuarial release of $1.1 million is due to the changes to our valuation basis in the front end, combined with lower than expected payments in the last six months.

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		0.7
Changes to Valuation Basis		
Ultimate claims	(0.1)	
PPCI Changes	0.5	
Subtotal		0.4
Total		1.1

The main driver is the reduction in our front end PPCI basis for RTW Act claims, due to lower Other Sundry payments over the six month which are expected to continue.

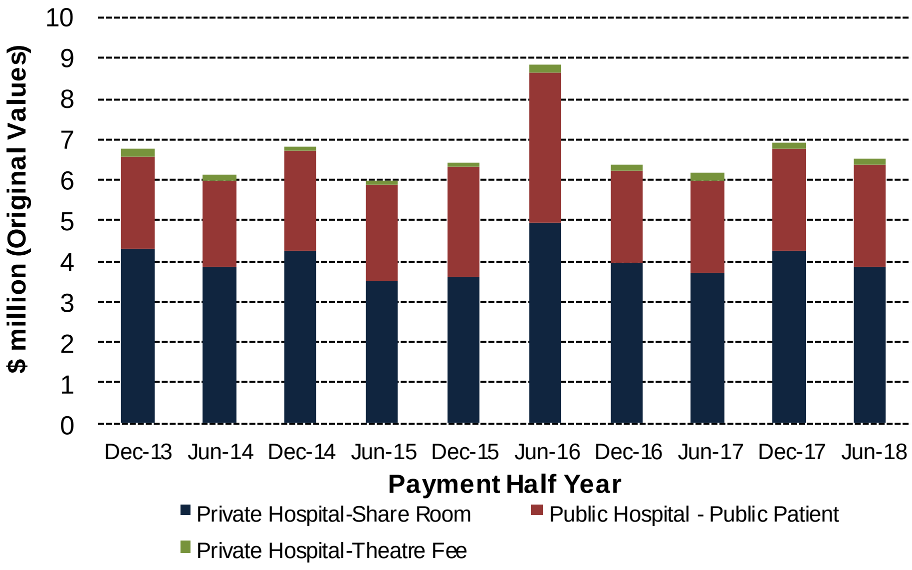
7.5 Hospital

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



Hospital payments in financial year 2018 have been higher than the 2017 year. This follows a spike in payments in the June 2016 half-year which we are largely treating as a one-off feature of the experience.

Table 7.8 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 7.8 - Actual vs Expected Payments: Hospital

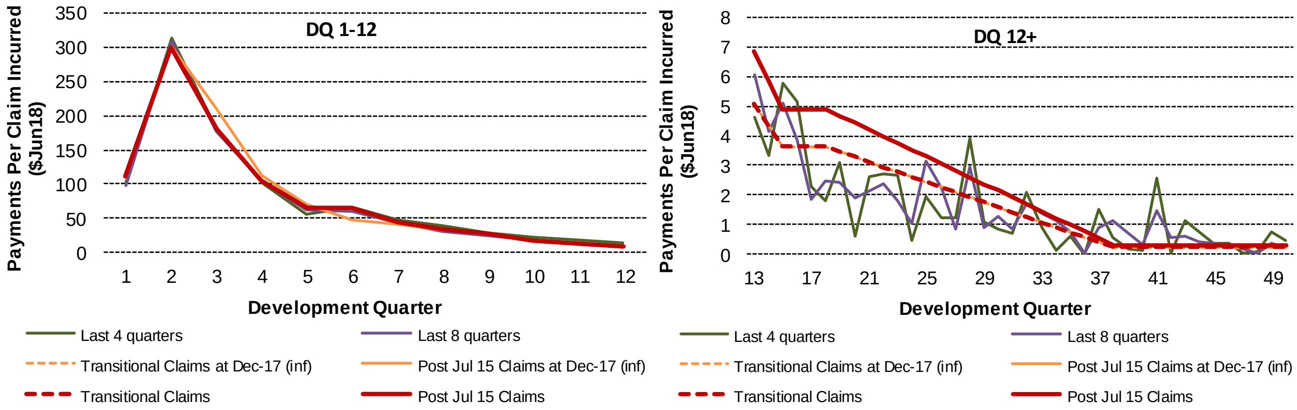
Accident Period	Payments in Six Months to Jun 18			
	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.1	(0.1)	15%
2005/06 - 2012/13	0.2	0.3	(0.1)	78%
2013/14 - 2014/15	0.2	0.2	0.0	101%
2015/16 - 2017/18	6.7	6.7	0.0	100%
Total	7.2	7.3	(0.1)	98%

The bulk of hospital payments are made in the first year or two after injuries occur. Payments in the last six months were as expected.

Valuation Basis

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

Figure 7.6 - Hospital Experience and Selections



We have reshaped the basis in the first and second years post injury, to reflect recent payment experience.

The basis for transitional claims is unchanged at this valuation given payments for accident years 2015 and prior are running off close to expectation. Additionally, 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 December 2017 valuation.

Table 7.9 - Actuarial Release for Hospital

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.8	0.8	(0.0)	(0.1)	0.1	9%
2005/06 - 2012/13	2.1	2.1	(0.0)	(0.1)	0.1	4%
2013/14 - 2014/15	1.6	1.6	(0.0)	0.0	0.0	1%
2015/16 - 2017/18	13.7	13.9	0.3	0.0	(0.3)	-2%
Total	18.2	18.4	0.2	(0.1)	(0.1)	-1%

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

The $0.2 million increase in the projected liability combined with actual payments being $0.1 million lower than expected results in an actuarial strengthening of $0.1 million.

Table 7.10 breaks down the actuarial strengthening by source.

Table 7.10 - Components of Actuarial Release: Hospital

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

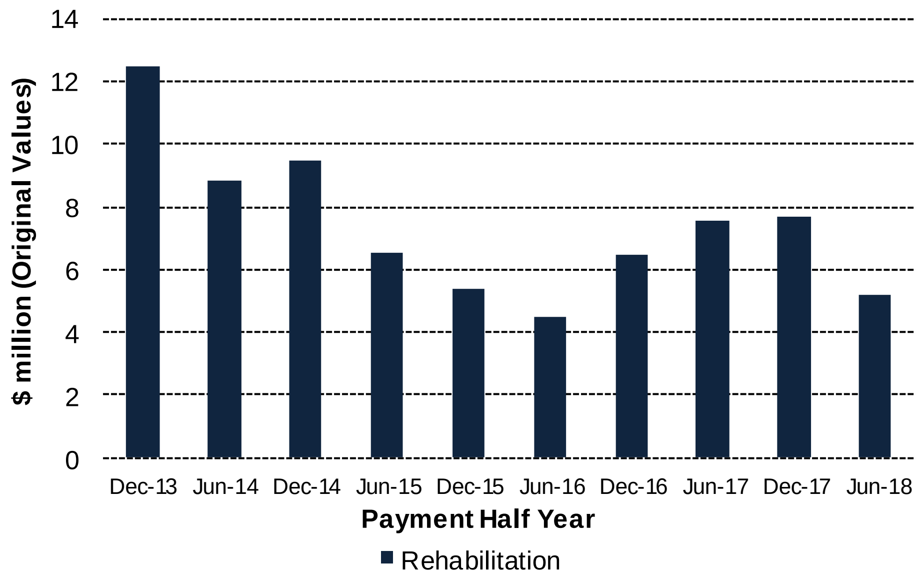
7.6 Rehabilitation

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



From 2013 to June 2016 rehabilitation payments reduced considerably. Since then however, there had been an increase in rehabilitation spending by agents as part of new strategies to achieve better return to work outcomes, before a significant reduction occurred in the last six months as new operational directives to reduce rehabilitation spend were implemented.

Table 7.11 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 7.11 - Actual vs Expected Payments: Rehabilitation

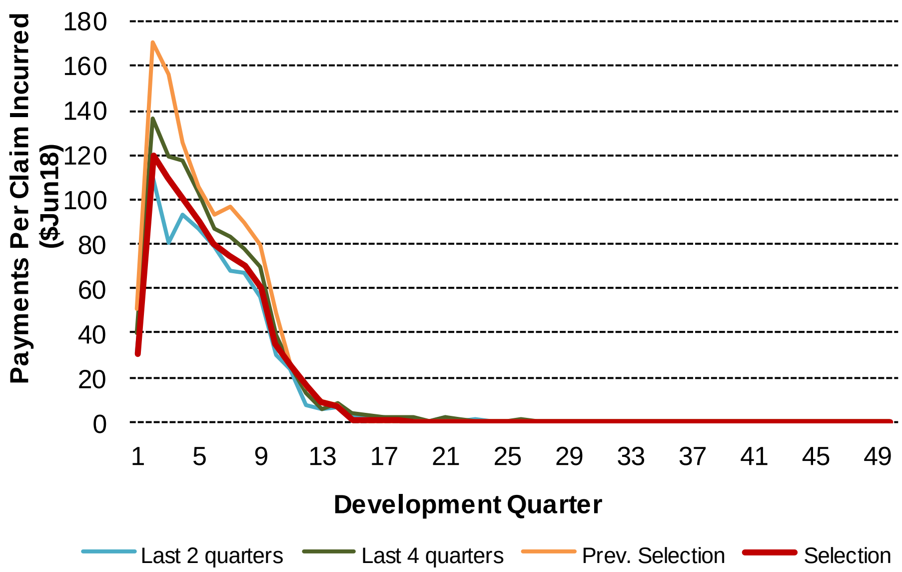
Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2012/13	0.0	0.1	(0.1)	40%
2013/14 - 2014/15	0.1	0.3	(0.2)	43%
2015/16 - 2017/18	5.0	7.1	(2.1)	70%
Total	5.2	7.6	(2.4)	68%

Overall, payments were $2.4 million less than expected, driven almost entirely from post-reform years.

Valuation Basis

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

Figure 7.8 - Rehabilitation Experience and Selections



We have decreased the selected PPCI pattern at this valuation to reflect the recent decrease in the utilisation of rehabilitation services.

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 December 2017 valuation.

Table 7.12 - Actuarial Release for Rehabilitation

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	n/a
2005/06 - 2012/13	0.0	0.0	(0.0)	(0.1)	0.1	982%
2013/14 - 2014/15	0.1	0.1	(0.0)	(0.2)	0.2	282%
2015/16 - 2017/18	16.7	13.7	(3.0)	(2.1)	5.1	31%
Total	16.7	13.8	(3.0)	(2.4)	5.4	32%

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

The $3.0 million decrease in the projected liability combined with actual payments being $2.4 million less than expected results in an actuarial release of $5.4 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		2.4
Changes to Valuation Basis		
Ultimate claims	(0.3)	
PPCI Changes	3.2	
Subtotal		3.0
Total		5.4

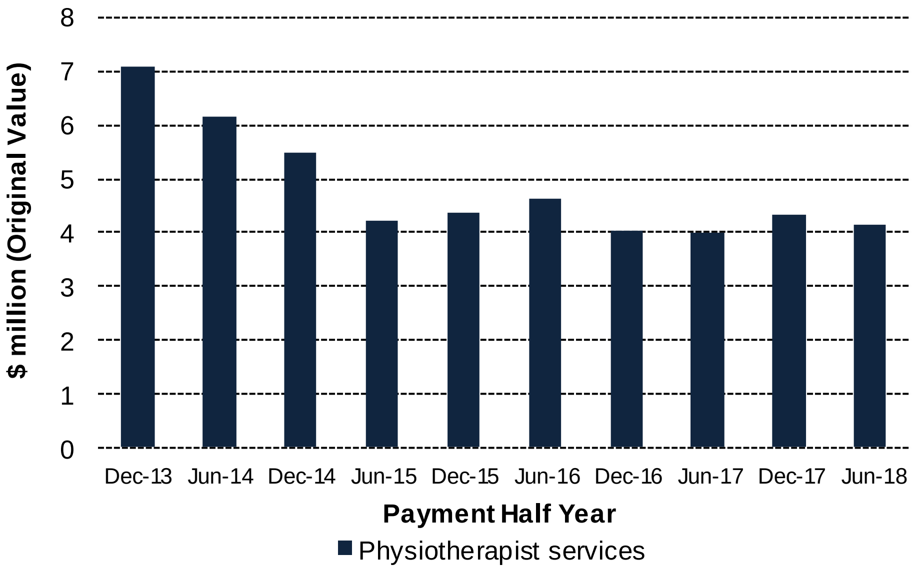
7.7 Physical Therapy

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



Physical therapy payments have been relatively stable since June 2015.

Table 7.14 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection. Overall, payments were $0.2 million (4%) lower than expected.

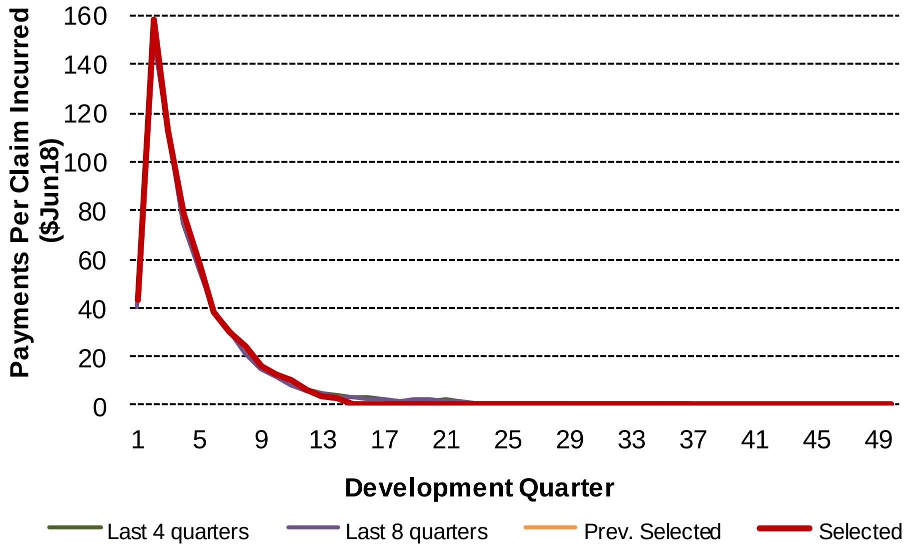
Table 7.14 - Actual vs Expected Payments: Physical Therapy

Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	254%
2005/06 - 2012/13	0.1	0.1	(0.0)	85%
2013/14 - 2014/15	0.2	0.2	0.0	105%
2015/16 - 2017/18	3.8	4.0	(0.2)	96%
Total	4.1	4.3	(0.2)	96%

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 PPCI assumptions are unchanged from the December 2017 valuation.

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 December 2017 valuation.

Table 7.15 - Actuarial Release for Physical Therapy

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	n/a
2005/06 - 2012/13	0.0	0.0	(0.0)	(0.0)	0.0	297%
2013/14 - 2014/15	0.0	0.0	(0.0)	0.0	(0.0)	-21%
2015/16 - 2017/18	6.6	6.7	0.1	(0.2)	0.0	1%
Total	6.6	6.8	0.1	(0.2)	0.0	1%

[1] 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 $0.2 million lower than expected results in essentially no change to the Physical Therapy basis from the December 2017 valuation.

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		0.2
Changes to Valuation Basis		
Ultimate claims	(0.1)	
PPCI Changes	0.0	
Subtotal		(0.1)
Total		0.0

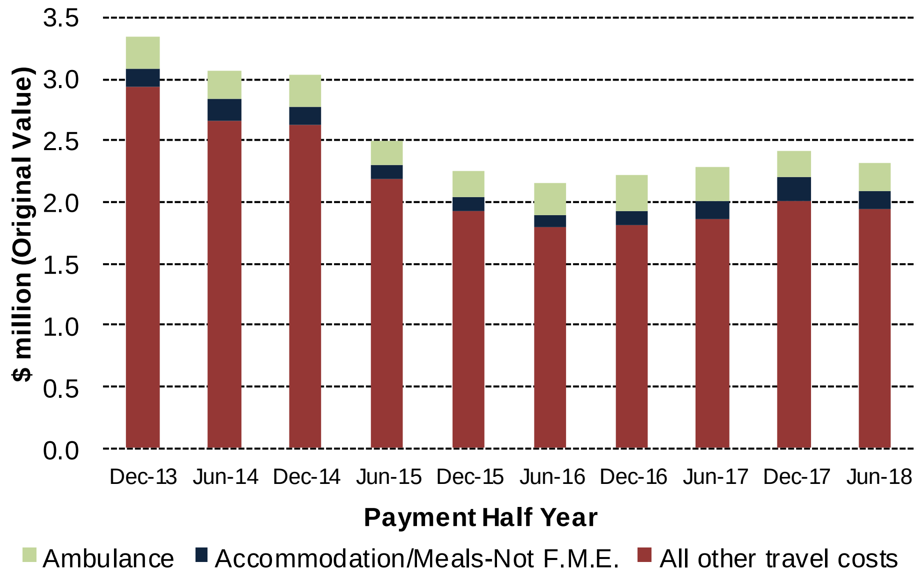
7.8 Travel

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 in the half year to June 2018 have reversed an increasing trend since June 2016, with $0.1 million (4%) less paid than expected in the last six months.

Table 7.17 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 7.17 – Actual vs Expected Payments: Travel

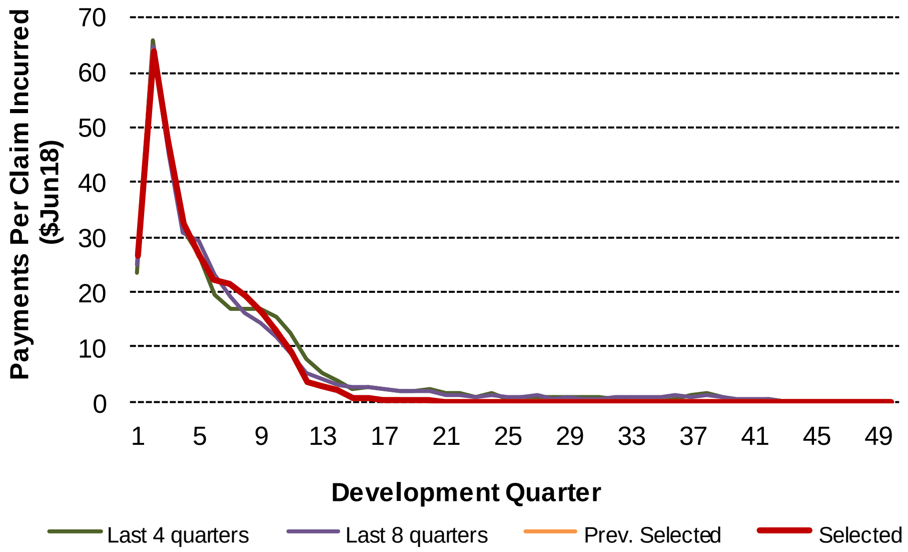
Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	(0.0)	37%
2005/06 - 2012/13	0.2	0.2	(0.0)	86%
2013/14 - 2014/15	0.2	0.2	0.0	123%
2015/16 - 2017/18	2.0	2.0	(0.1)	96%
Total	2.3	2.4	(0.1)	96%

Overall, payments in the last six months were $0.1 million less than expected.

Valuation Basis

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

Figure 7.12 - Travel Experience and Selections



Our PPCI assumptions are unchanged from the December 2017 valuation.

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 December 2017 valuation.

Table 7.18 - Actuarial Release for Travel

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	(0.0)	0.0	n/a
2005/06 - 2012/13	0.0	0.0	(0.0)	(0.0)	0.0	310%
2013/14 - 2014/15	0.1	0.0	(0.0)	0.0	(0.0)	-52%
2015/16 - 2017/18	4.2	4.2	0.1	(0.1)	0.0	0%
Total	4.2	4.3	0.0	(0.1)	0.0	1%

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

Overall there has essentially been no change to travel costs in the last six months.

Table 7.19 breaks down the actuarial change by source.

Table 7.19 - Components of Actuarial Release: Travel

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

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 December 2017 valuation.

Table 8.1 - Valuation Results: Other Payment Types

	Worker Legal	Corporation Legal	Invest-igation	Common Law	LOEC	Commu-tation	Recoveries	Total
Dec17 Valuation	$m	$m	$m	$m	$m	$m	$m	$m
Estimated Liab at Dec-17	28.7	32.4	1.8	2.5	0.9	2.2	(24.5)	44.0
Projected Liab at Jun-18	28.5	32.0	1.8	2.5	0.7	2.2	(24.7)	43.0
Jun-18 Valuation								
Impact of experience/OSC - Movement in liab	7.3	1.4	0.2	0.0	(0.0)	0.0	(0.0)	8.9
Estimated Liab at Jun-18 (Dec-17 eco assumptions)	**35.7**	**33.4**	**2.0**	**2.6**	**0.7**	**2.2**	**(24.7)**	**51.9**
Impact of change in eco assumptions	(0.1)	0.1	0.0	(0.0)	0.0	0.0	0.1	0.0
Estimated Liab at Jun-18 (Jun-18 eco assumptions)	**35.6**	**33.4**	**2.0**	**2.5**	**0.7**	**2.3**	**(24.7)**	**51.9**
AvE Payments - six months to Jun-18	0.9	0.1	0.0	(0.2)	(0.0)	0.5	(1.6)	(0.3)
Actuarial Release at Jun-18	(8.2)	(1.5)	(0.3)	0.1	0.0	(0.5)	1.6	(8.7)

The movements from our December 2017 projection of the June 2018 liability are:

- An increase of $8.9 million in the liability, reflecting the claims experience since December 2017 and our valuation response. Combined with payments being $0.3 million lower than expected, this produces an actuarial increase (strengthening) of $8.7 million.
- The change in economic assumptions at the current valuation has little impact overall on Other Entitlements.

8.2 Worker Legal

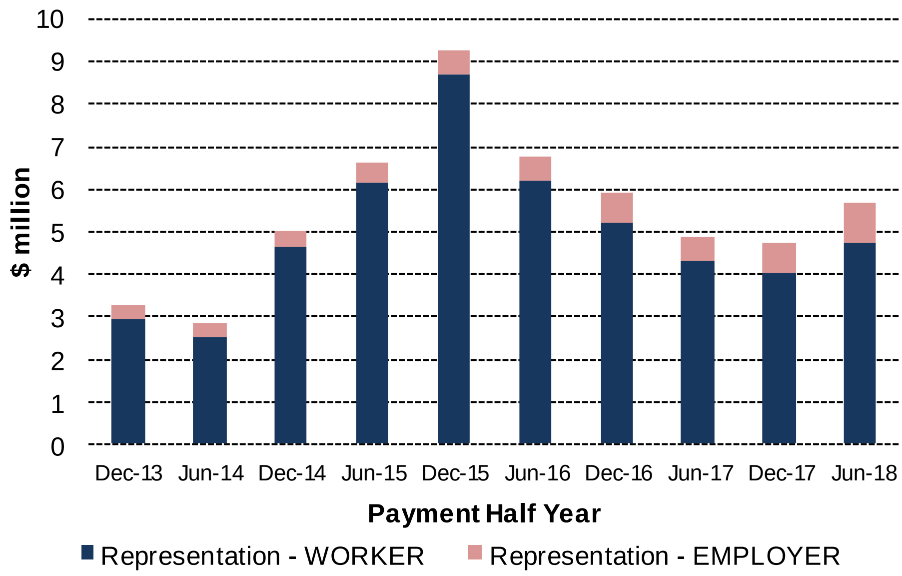
Our valuation of legal costs separately models legal fees paid to ReturnToWorkSA's contracted legal advisers (Minter Ellison and Sparke Helmore), which we call 'corporation legal', and legal fees paid to workers' representatives and employers, which we call 'worker legal'. This section describes the 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. The reduction in dispute numbers during the 2015/16 year continues to emerge in the payment experience, reflecting the long delay between lodgement of disputes and payment of worker legal fees. That said, worker legal payments are still well higher than they were in 2013 and have increased in the last six months. As shown in Section 3.3.2, there remain a large number of open disputes in the scheme.

Disputes being lodged for RTW Act accidents have been relatively stable at around 140 per month, which is lower than the longer-term average level of around 200 disputes per months for pre-RTW Act periods. However it remains to be seen if the lower level of disputes can be maintained going forward as WPI assessments will likely lead to some increase from current levels; that said, dispute numbers should still remain below 200 per month for RTW Act claims.

Table 8.2 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 8.2 – Actual vs Expected Payments: Worker Legal

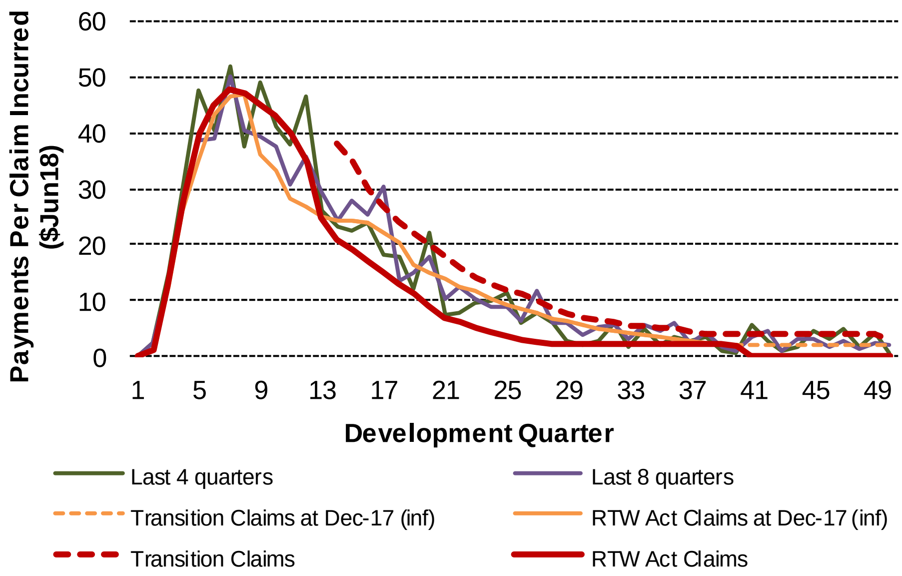
Accident	Payments in Six Months to Jun 18			
Period	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.2	0.1	0.2	320%
2005/06 - 2012/13	1.2	1.3	(0.1)	93%
2013/14 - 2014/15	1.4	1.2	0.2	116%
2015/16 - 2017/18	2.8	2.2	0.6	129%
Total	5.7	4.8	0.9	119%

Overall, payments in the six months to June 2018 were 19% higher than expected across all accident periods.

8.2.2 Valuation Basis

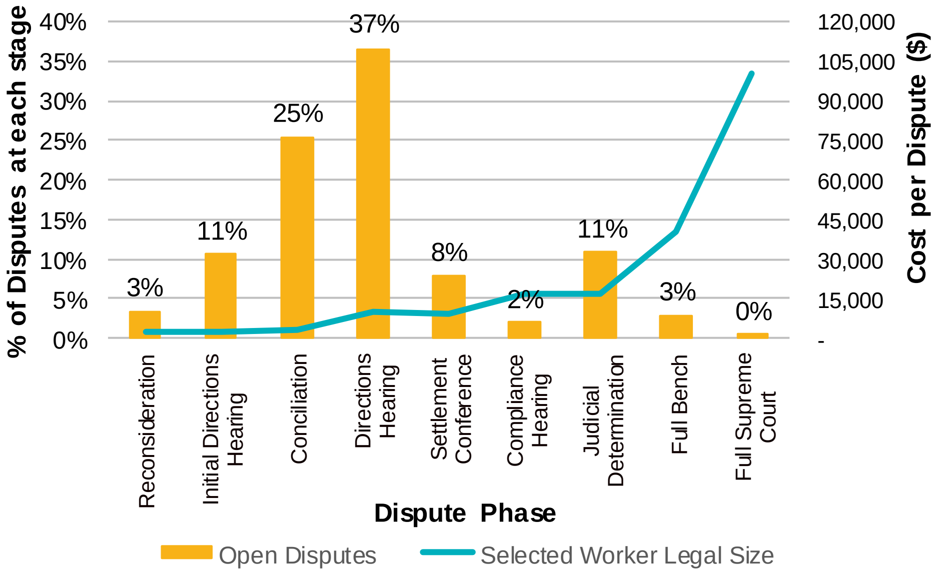
A PPCI model is used to value Worker Legal fees. Figure 8.2 below shows the recent experience and selected basis for worker legal payments.

Figure 8.2 - Worker Legal Experience and Selections



For transitional claims, we have increased our valuation basis by around $10 million (undiscounted) at this valuation to reflect the high number of open disputes currently in the scheme and their progression through the dispute resolution process. Having analysed the current dispute phase of the 1,500 open disputes, and the approximate costs for each phase of dispute this increase was necessary to reflect more of the transitional claims staying in dispute for longer and moving into the more costly stages of the process. This is illustrated in Figure 8.3 below.

Figure 8.3 – Open Transition Disputes and Selected Cost, by Dispute Phase



The selected cost per dispute (for worker legal payments) for each dispute phase are based on analysis of finalised disputes over the last four years. The implied size for open transition disputes is around $9,300 per dispute, based on the split of open disputes and the selected dispute size; largely this is due to the 16% of disputes that are now at or past judicial determination.

Our revised valuation basis of around $18.5 million (undiscounted) for transitional worker legal costs allows for some progression of currently open disputes, along with a further 500 new disputes to be lodged (at a lower cost).

For RTW Act periods we have reduced our valuation basis at the current valuation, reflecting the lower level of disputes emerging in the experience for this cohort of claims. Our allowance is for RTW Act claims to cost around 20% less in worker legal costs than pre-RTW Act claims.

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 December 2017 valuation.

Table 8.3 - Actuarial Release for Worker Legal

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.1	0.1	0.2	(0.3)	N/A
2005/06 - 2012/13	3.3	10.3	7.0	(0.1)	(6.9)	-212%
2013/14 - 2014/15	5.4	8.5	3.1	0.2	(3.3)	-61%
2015/16 - 2017/18	19.8	16.9	(2.9)	0.6	2.3	11%
Total	28.5	35.7	7.3	0.9	(8.2)	-29%

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

The actuarial increase of $8.2 million is due to actual payments being $0.9 million higher than expected, and liability increases of $7.3 million.

Table 8.4 breaks down the actuarial release by source. The increased allowance for transitional claims is partially offset by reductions for RTW Act claims resulting in an overall increase of $7.2 million. In addition, there is a $0.1 million increase due to changes to ultimate claim number projections.

Table 8.4 - Components of Actuarial Release: Worker Legal

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(0.9)
Changes to Valuation Basis		
Ultimate claims	(0.1)	
PPCI Changes	(7.2)	
Subtotal		(7.3)
Total		(8.2)

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.

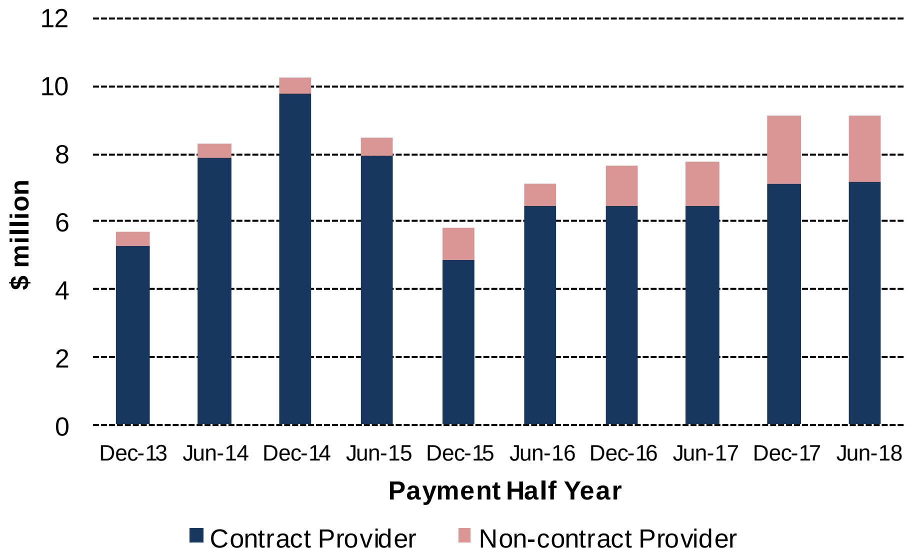
A performance fee is also payable at the end of each contract year based on the achievement of certain performance outcomes. This fee is unchanged for the FY2019 contract.

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 of the report.

8.3.1 Experience

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

Figure 8.4 - Corporation Legal Half Yearly Payments



Corporation Legal expenditure in the six months to June 2018 is in line with the December 2017 half-year and higher than recent periods due to higher contract and “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 3.1.2.

Table 8.5 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 8.5 - Actual vs Expected Payments: Corporation Legal

	Payments in Six Months to Jun 18			
	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
Total	9.1	9.0	0.1	102%

Overall, actual payments were $0.1 million (2%) higher than expected driven by “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

Matter Type	Contract Terms Current
Advice only	Fixed Fee per month
Dispute representation	
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
  - We have revised the fixed fee per month starting from July 2018 to reflect the new terms of the FY2019 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 payment of two complex matters per year, unchanged from our previous valuation basis
- 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 $1.1 million per half year is unchanged from the previous valuation
  - We have extended our temporary allowance of $1 million per half-year until June 2019 (additional half-year) 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 December 2017 valuation.

Table 8.7 - Actuarial Release for Corporation Legal

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release¹	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.7	(0.7)	N/A
2005/06 - 2012/13	0.2	0.2	0.0	2.0	(2.0)	-1113%
2013/14 - 2014/15	2.9	3.0	0.1	0.1	(0.2)	-7%
2015/16 - 2017/18	29.0	30.2	1.2	(2.6)	1.3	5%
Total	32.0	33.4	1.4	0.1	(1.5)	-5%

¹ Includes change in OSC and Act vs Exp payments. Positive values represent accounting profit (valuation release), negative values represent accounting loss

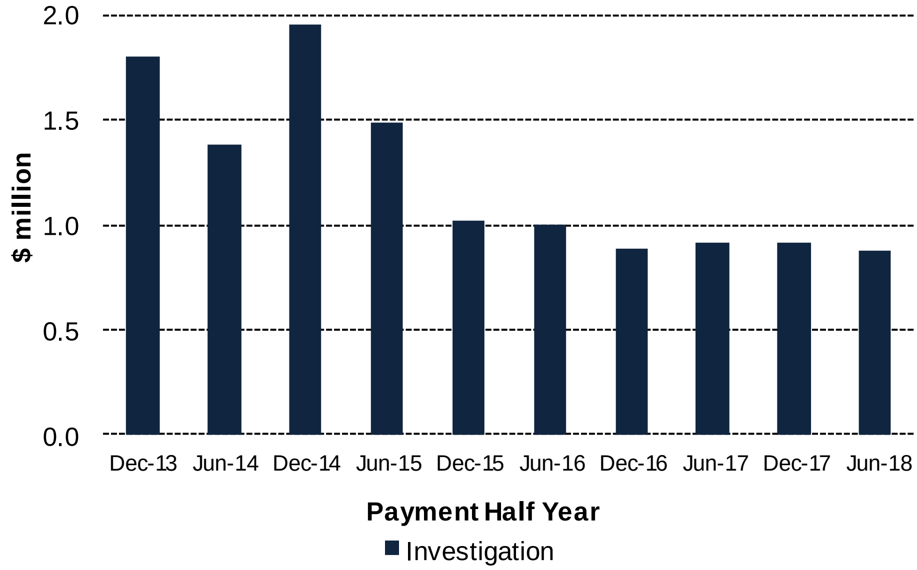
The $1.4 million increase in the projected liability due to the increase in the allowance for Supreme Court matters combined with actual payments being $0.1 million more than expected results in an actuarial increase of $1.5 million.

8.4 Investigation

8.4.1 Experience

Figure 8.5 below shows investigation payments in each six month period over the last five years.

Figure 8.5 - Investigation Half Yearly Payments



Investigation spending have remained under $1 million per half-year since June 2016. The reduction in investigation payments since June 2016 is consistent with ReturnToWorkSA utilising claims agent staff as 'Mobile Insurance Loss Adjusters' which replaces some of the work that was previously done as part of investigation costs.

Table 8.8 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 8.8 - Actual vs Expected Payments: Investigation

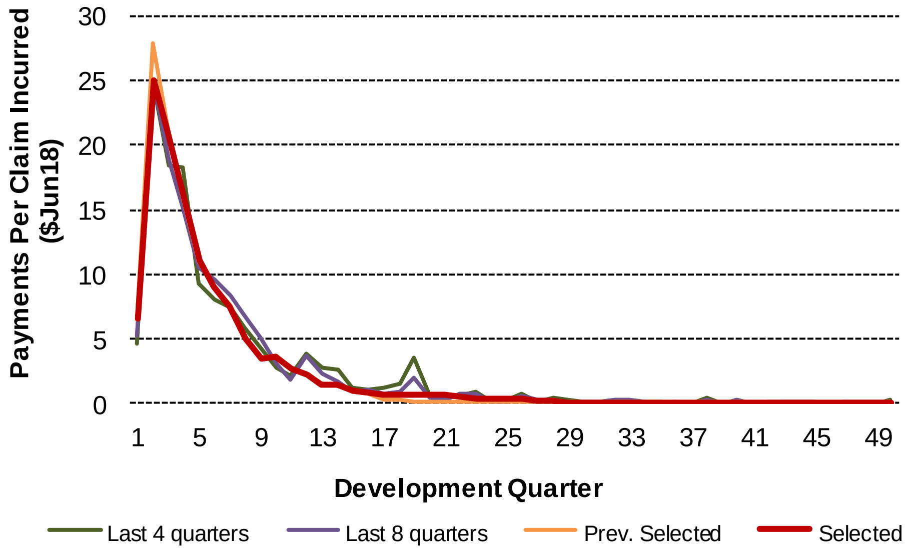
Accident Period	Payments in Six Months to Jun 18			
	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2012/13	0.1	0.0	0.0	302%
2013/14 - 2014/15	0.1	0.0	0.1	285%
2015/16 - 2017/18	0.7	0.8	(0.1)	89%
Total	0.9	0.8	0.0	104%

Overall, actual payments were 4% higher than expected, with higher spending for transitional claims.

8.4.2 Valuation Basis

A PPCI model is used to value investigation payments. Figure 8.6 below shows the recent experience and selected basis.

Figure 8.6 - PPCI Experience and Selections: Investigation



The adopted investigation PPCIs have been reshaped with earlier durations reducing, offset by increases at later durations in response to the emerging payment pattern. 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 December 2017 valuation.

Table 8.9 - Actuarial Release for Investigation

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	(0.0)	0.0	(0.0)	N/A
2005/06 - 2012/13	0.1	0.1	0.0	0.0	(0.0)	-61%
2013/14 - 2014/15	0.1	0.2	0.1	0.1	(0.2)	-207%
2015/16 - 2017/18	1.6	1.8	0.2	(0.1)	(0.1)	-4%
Total	1.8	2.0	0.2	0.0	(0.3)	-16%

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

The $0.2 million increase in the projected liability combined with by actual payments being slightly higher than expected results in a minor actuarial increase of $0.3 million.

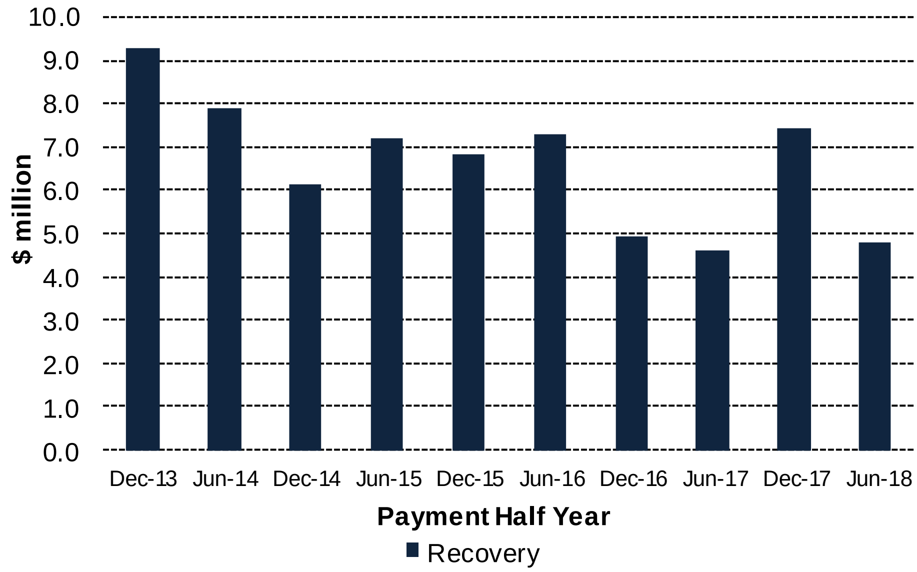
8.5 Recoveries

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

Figure 8.7 - Recovery Half Yearly Payments



Recovery payments have generally been lower since 2014 in line with reducing gross payment levels.

Table 8.10 compares the payments in the six months to 30 June 2018 with the expected payments from our December 2017 valuation projection.

Table 8.10 - Actual vs Expected Payments: Recoveries

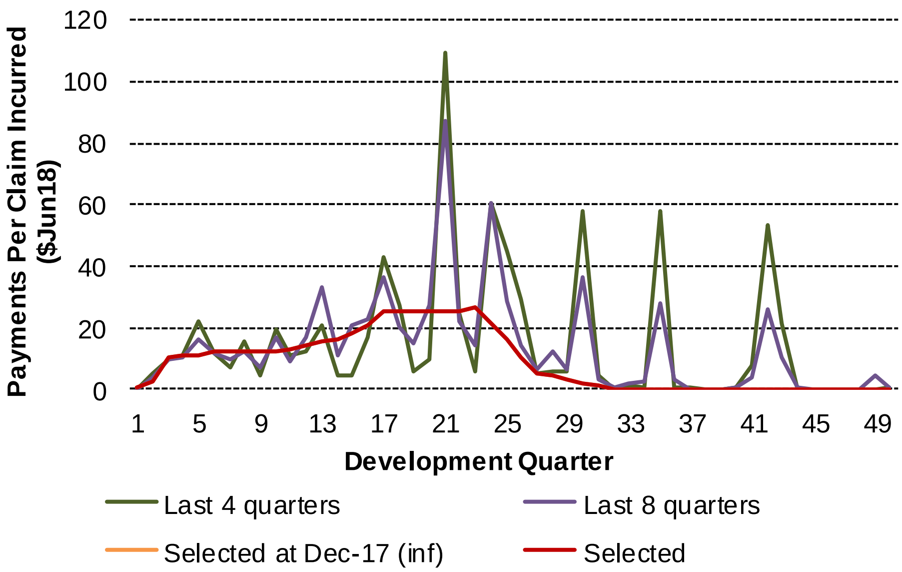
Accident Period	Payments in Six Months to Jun 18			
	Actual	Expected	Act - Exp	Act/Exp
	$m	$m	$m	
To 30 Jun 05	(0.0)	0.0	(0.0)	n/a
2005/06 - 2012/13	(3.4)	(1.2)	(2.2)	275%
2013/14 - 2014/15	(0.6)	(1.2)	0.6	51%
2015/16 - 2017/18	(0.7)	(0.8)	0.0	94%
Total	(4.8)	(3.2)	(1.6)	149%

Overall, actual recovery payments were higher than expected ($1.6 million more than expected) driven by one large recovery for the 2008 accident year.

8.5.2 Valuation Basis

A PPCI model is used for recovery payments. Figure 8.8 below shows the recent experience and selected basis.

Figure 8.8 - PPCI Experience and Selections: Recoveries



Our selected recovery PPCI assumptions are unchanged at this valuation and is in line with the recent experience at early durations. Our selection is lower than the experience at longer durations and reflects 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 December 2017 valuation.

Table 8.11 - Actuarial Release for Recoveries

Accident Period	Projected Liab at Jun 18 from Dec 17 Valuation	Jun 18 Estimate on Dec 17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	(0.0)	0.0	0%
2005/06 - 2012/13	(1.5)	(1.5)	0.0	(2.2)	2.2	-142%
2013/14 - 2014/15	(6.5)	(6.5)	0.1	0.6	(0.6)	10%
2015/16 - 2017/18	(16.7)	(16.8)	(0.1)	0.0	0.1	0%
Total	(24.7)	(24.7)	(0.0)	(1.6)	1.6	-7%

[1] 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 $1.6 million is due to actual recoveries being $1.6 million above expectations.

8.6 LOEC, Commutations, and Common Law

LOEC, Commutations, and Common Law are small 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 30 June 2018, there are only five remaining claims. The basis is largely unchanged from our previous valuation.

8.6.2 Commutations

Commutation payments relate to claims receiving dependant benefits. Payments in the last six months were around $0.5 million higher than expected driven by one large commutation.

The basis is unchanged from the previous 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 30 June 2018, and the movement in our liability estimates since the December 2017 valuation.

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

	Income Support	Medical	Other (Care)	Hospital	Travel	Rehabi litation	Physical Therapy	Investi gation	Legal - Non-Contract	Legal Contract	Lump sums	Recov-eries	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
Dec-17 Valuation													
Estimated Liab at Dec-17	310	457	354	90	48	37	36	1	9	9	51	-28	1,375
Projected Liab at Jun-18	318	476	366	95	51	39	38	1	9	9	42	-27	1,416
Jun18 Valuation													
Impact of experience/basis change	30	7	-6	-3	0	-2	0	0	1	1	17	-1	44
Estimated Liab at Jun18 (Dec17 ecos)	**349**	**483**	**360**	**92**	**51**	**37**	**38**	**1**	**9**	**10**	**59**	**-29**	**1,460**
Impact of change in ecos	2	11	7	2	1	1	1	0	0	0	0	0	26
Estimated Liab at Jun18 (Jun18 ecos)	**350**	**494**	**367**	**95**	**52**	**38**	**39**	**1**	**9**	**9**	**59**	**-28**	**1,486**
AvE Payments - six months to Jun-18	0	-1	0	0	0	0	0	0	0	0	-12	2	-12
Actuarial Release at Jun-18	-30	-6	6	3	-1	3	0	0	-1	0	-5	0	-31

The outstanding claims cost for Serious Injury claims (excluding CHE), is $1,486 million at 30 June 2018. The main movements from our December 2017 projection of the June 2018 liability are:

- Claims experience and basis changes increase the liability by $44 million, as a result of:
  - Net changes to claim numbers (including IBNR claims) increasing the liability by $56 million
  - Changes to the entitlement status of already known claims decreasing the liability by $5 million (this is predominantly driven by a single redemption)
  - Basis and assumption changings leading to a reduction of $6 million
- The change in economic assumptions at the current valuation – principally the decrease in the long term discount rate assumption, increases the estimated liability by $26 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 currently 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.
  - This group has continued to reduce in size, following the spike in assessments associated with transitional Short Term claims ceasing IS benefits at 30 June 2017; however, it has not run-off as quickly as we have expected over the last 12 months, due to additional Serious Injury activity on transitional claims that was not anticipated.
  - As ReturnToWorkSA actively assess the likelihood of potential Serious Injury claims before a formal WPI assessment or Serious Injury determination, these 'potential' Serious Injury claims will continue to be included as part of the valuation going forward.
- IBNR claims that will be identified in future.

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 18 years) and for moderate care needs (reducing life expectancy by 8 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. Allowed for IBNER on Other and Medical costs above identified costs.	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 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	Applied a recovery as a proportion of

	Severe Traumatic Injuries	Other Serious Injury
	potential.	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: IS 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.	WCI: IS AWE: Recoveries, Treatment and Other, Legal and Investigation Superimposed: 2% p.a. on Treatment and Other
IBNR Assumptions	IBNR claims in the latest five accident years only. Claim size based on historical experience on current claims.	IBNR claims in the latest twelve 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 on 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. Over the course of the last six months, ReturnToWorkSA has identified that the approach recently taken to calculate these estimates has changed (unintentionally) and that these estimates are currently more short term focused and not necessarily appropriate for a lifetime valuation. In response, we have 'rolled-forward' our estimates from the previous valuation as we do not want to introduce undue volatility to the valuation result based on short-term changes in the estimation methodology. At an aggregate level we believe that the liability for these claims remains appropriate. ReturnToWorkSA is working to ensure that the estimates provided take a sufficiently long-term view of each claimants needs, such that they are appropriate for valuation purposes.

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 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.

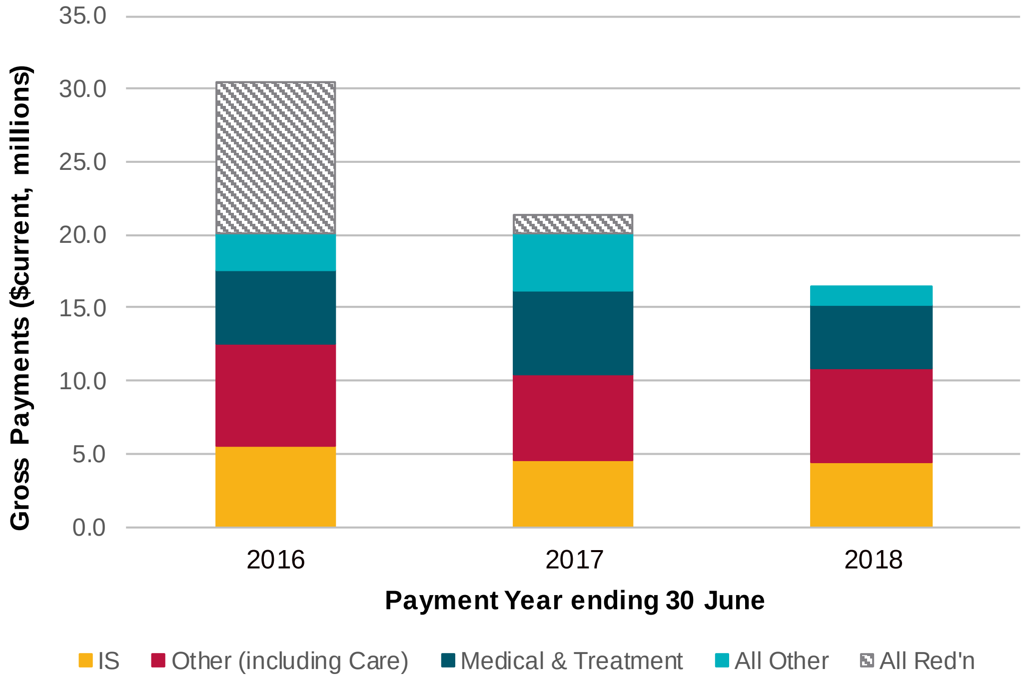
One of the key determinants of very long term costs will be how much, if any, of the costs associated with ageing are compensated out of the compensation scheme. For example, whether ReturnToWorkSA will fund the full costs of living in a nursing home for an elderly claimant or just the additional care costs associated with the original injury is at this stage still in the early stages of being worked through, but will become increasingly important as the Severe Traumatic Injury claimants age. Our basis does not attempt to capture the full costs for age related care and support, which is consistent with the current understanding of the approach to aged care related costs being funded.

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 ($Jun-18)



$68 million has been paid to Severe Traumatic Injury claims in the last three years. After allowing for recoveries of almost $12 million over this same period and excluding redemptions, this equates to an average of around $15 million per annum in net claim payments (inflated to 30 June 2018 values), comprising around:

- $6 million per annum in care and other costs

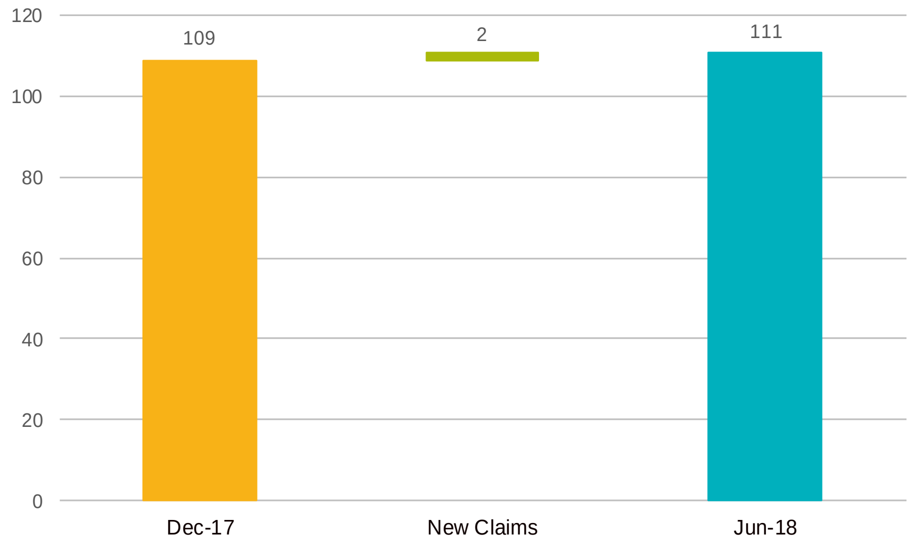
- $5 million per annum in medical, treatment and related benefits
- $5 million per annum in Income Support
- $2 million per annum in lump sums
- Small amounts of legal and investigation payments ($0.4 million per annum)
- $4 million per annum in recoveries.

As Figure 9.1 shows, there were a number of redemption payments on this group, which relate to negotiations commenced prior to introduction of the RTW Act and IS only redemptions. It is not expected that redemptions will be an ongoing feature for Serious Injury claims.

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

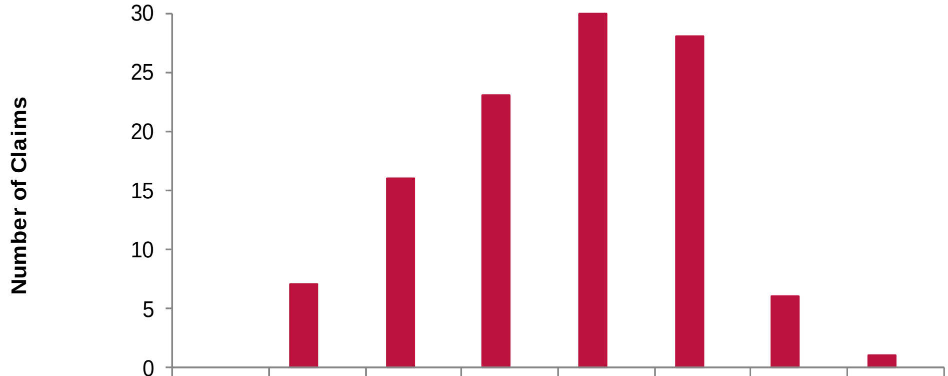


There are 111 active (i.e. with expected ongoing benefits) Severe Traumatic Injury claims at June 2018, compared to 109 at the previous valuation. This increase was due to 2 new claims. New claim numbers continue to be lower than expected for this group of the most seriously injured claimants.

While we would generally expect a slow increase in the number of active Severe Traumatic Injury claims over time (as the benefits are available for life, and the scheme has not yet existed for long enough to reach its 'steady state'), this has not been the case in the last two years due to a combination of lower than expected new claims, slightly higher deaths and a number of claims being transferred to new self-insurers.

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	7	16	23	30	28	6	1
Loaded Life Expectancy	0	58	40	36	23	17	9	5

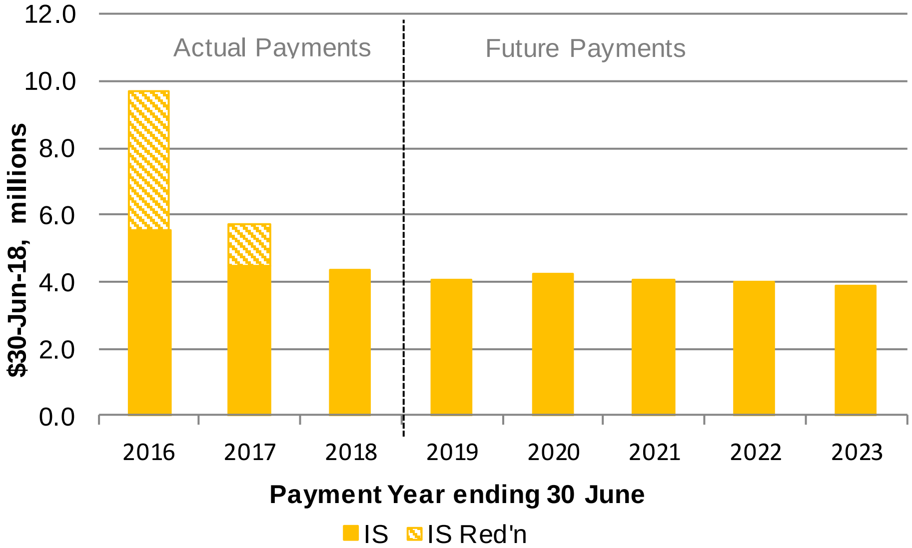
Severe Traumatic Injury claimants are currently around 51 years old on average, with an expected future life expectancy of around 31 years (after allowing for mortality, mortality improvements and mortality loadings). The average age at injury was about 40 years.

Over half the current Severe Traumatic Injuries have a WPI assessment, with an average WPI of around 55%; this 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 were 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 ($Jun-18)

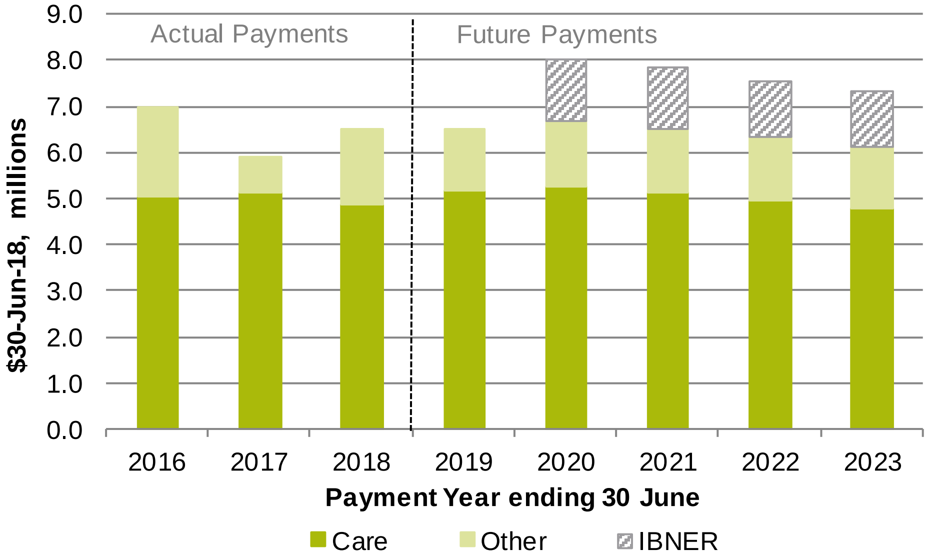


We estimate around $4.0 million will be paid in Income Support to Severe Traumatic Injury claims in 2019. Future payments reduce over time in line with changes in replacement ratios, expected mortality and retirement, with the outstanding claim projection equivalent to 16 years of the 2019 payments.

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 ($Jun-18)

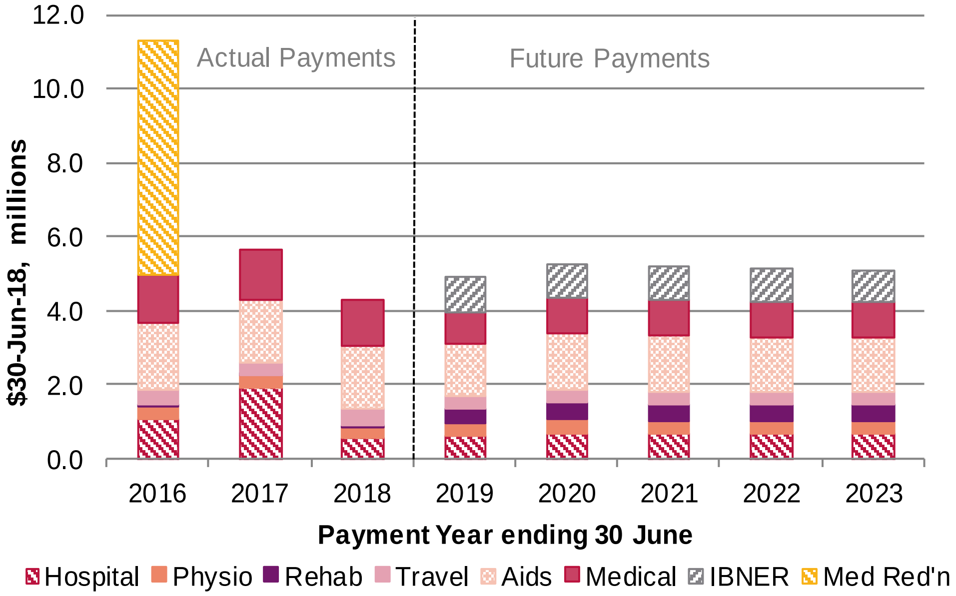


We expect $6.4 million of other and care payments in 2019, which is similar to the 2018 year. Payments then increase in the short term due to allowance for new Severe Traumatic (IBNR) claims and our IBNER allowance which is intended to capture an annualised contribution for other benefits (primarily 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 30 years of the 2019 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 ($Jun-18)

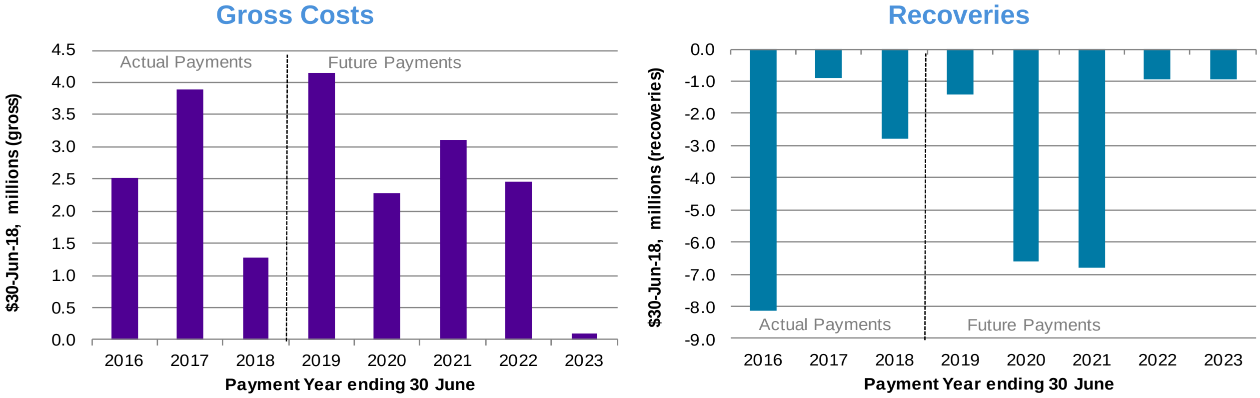


We expect future treatment and related payments of $4.9 million in 2019, similar to the 2018 level. The outstanding claims projection is equivalent to 36 years of the 2019 payments.

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 ($Jun-18)



In the three years to 30 June 2018, a net amount of -$4 million of other benefits was received for Severe Traumatic Injury claims. Our future projections include:

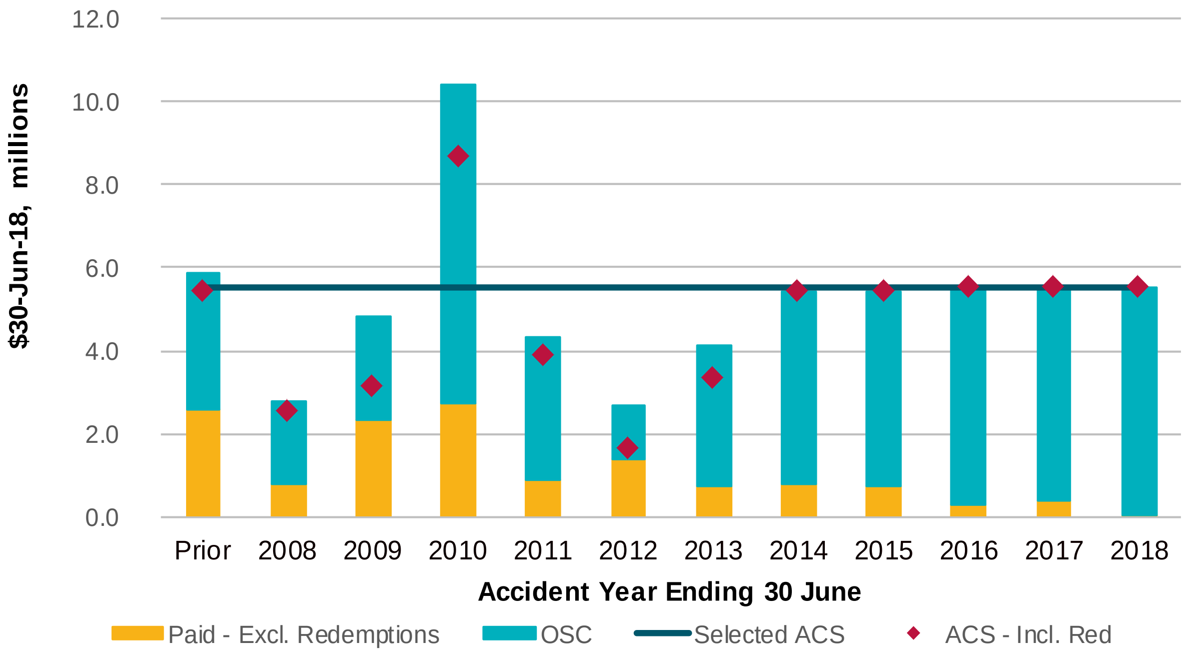
- Lump sum benefits of $11.0 million paid to current Serious Injury claims who have not yet had a lump sum paid
- Legal and investigation costs of $1.8 million
- Recoveries of $16.6 million, for those claims where ReturnToWorkSA has identified recovery potential.

Due to the one-off nature of most of these payments, the outstanding liability is a much lower multiple of 2019 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, and 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 ($Jun-18)



The average claim size across current Severe Traumatic Injury claims is around $4.9 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 $5.4 million, which is similar to the projected average size ($5.5m) for recent accident years where injuries are yet to stabilise. This is similar to the previous valuation.

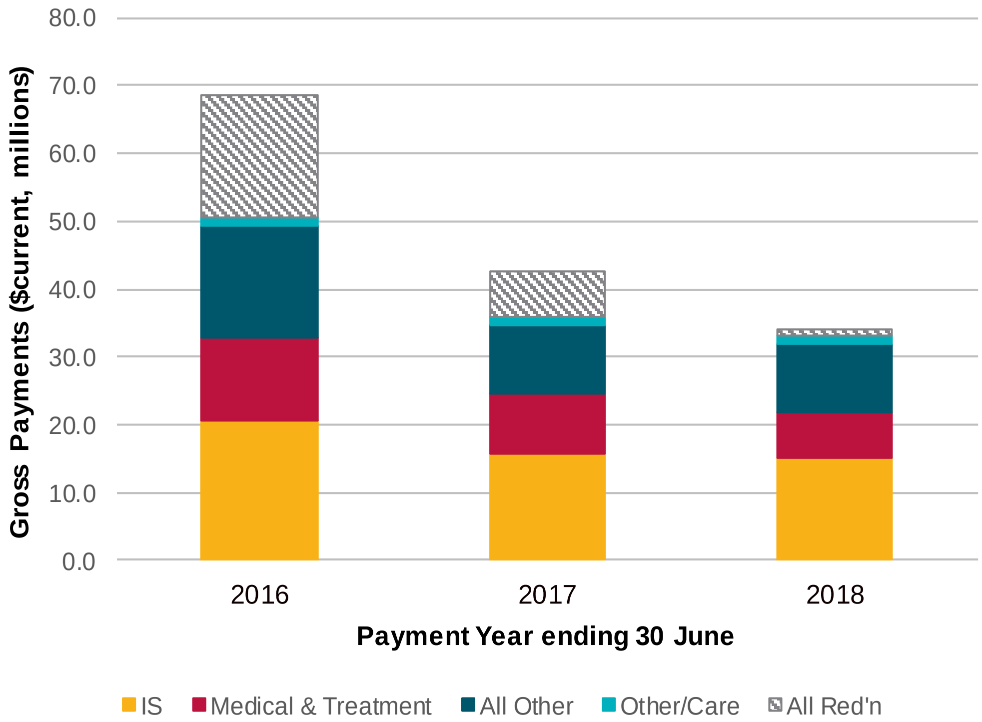
In aggregate we have reduced claim numbers for Severe Traumatic Injury claims in recognition of consistently lower than expected new claims coming into the EnABLE group over the last few valuations, which reduces the ultimate costs for the last few accident years.

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 ($Jun-18)



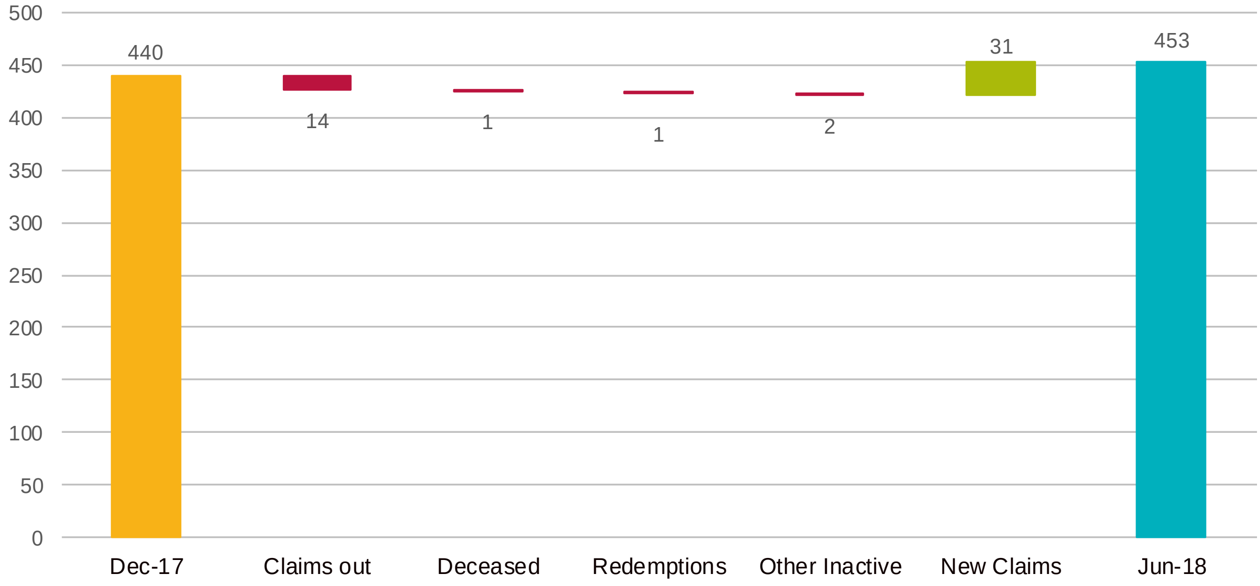
Around $145 million has been paid to Other Serious Injury claims in the last three years. After allowing for recoveries of around $4 million over this same period and removing redemptions, this equates to an average of around $38 million per annum in net claim payments (inflated to 30 June 2018 values), comprising:

- $17 million per annum in Income Support
- $9 million per annum in medical, treatment and related benefits
- $10 million per annum in lump sums
- Small amounts of other benefits ($3 million)
- $2 million per annum in recoveries.

9.5.2 Claimant Profile

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

Figure 9.10 – Movement in Other Serious Injury Claim Numbers



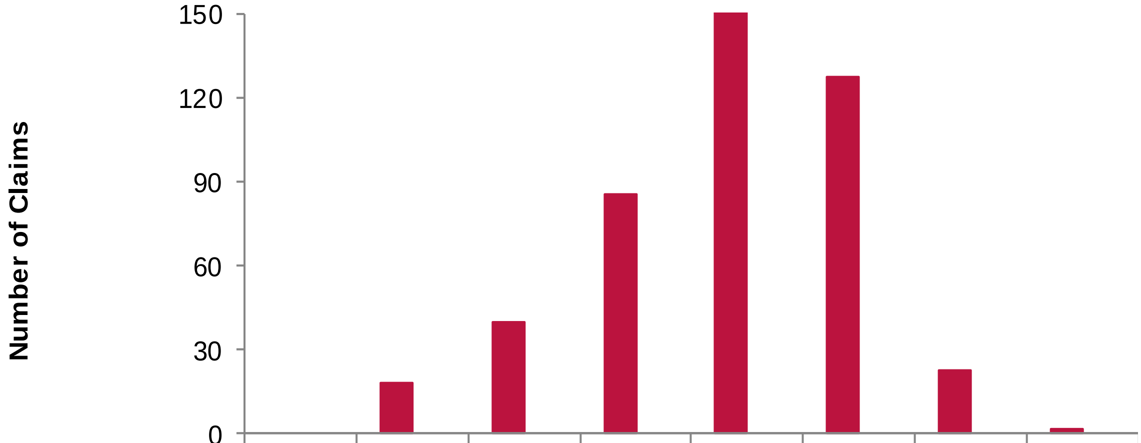
There are 453 active (i.e. with expected ongoing benefits) Other Serious Injury claims at June 2018, compared to 440 at the previous valuation. The major reasons for this change are:

- Claims Out – reduction of 14 claims. This largely refers to claims from the 'potential' cohort which were reviewed and found to not meet the eligibility criteria for a Serious Injury claim, or have low likelihood of being assessed as a Serious Injury claim. This is a subset of the 37 claims that were removed from ultimate claim numbers in section 4.2, representing only those claims that had an outstanding claims liability at the previous valuation.
- Deceased and redeemed – one claimant each
- Other Inactive – reduction of 2 claims. This reduction is because claims that have been closed for a prolonged period are unlikely to access benefits
- New Claims – increase of 31 claims. These are claims that were newly identified as Serious Injury over the last six months. Unlike the generally low value on claims removed in the 'Claims Out' and 'Other Inactive' cohorts, these claims have had a recent payment profile similar to that of a typical Serious Injury claim, leading to an increase in the outstanding claims liability.

With fewer claims remaining in the 'potential' group, we expect there to be a more consistent increase in the number of active Other Serious Injury claims over time (the size of which will be 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	18	40	86	158	128	23	2
Life Expectancy	0	51	45	39	28	21	13	8

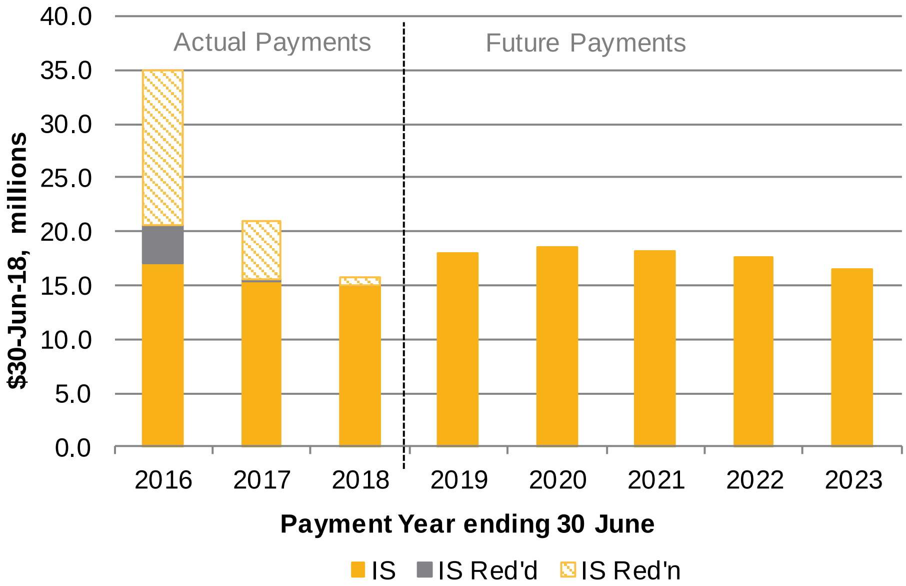
The Other Serious Injury claims are currently, on average, around 56 years old, with an expected future life expectancy of 30 years (after allowing for mortality, including mortality improvements). The average age at injury was 46 years.

Around 70% of the current Other Serious Injuries have a WPI assessment, averaging around 37% WPI. At this valuation, there were 41 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 ($Jun-18)

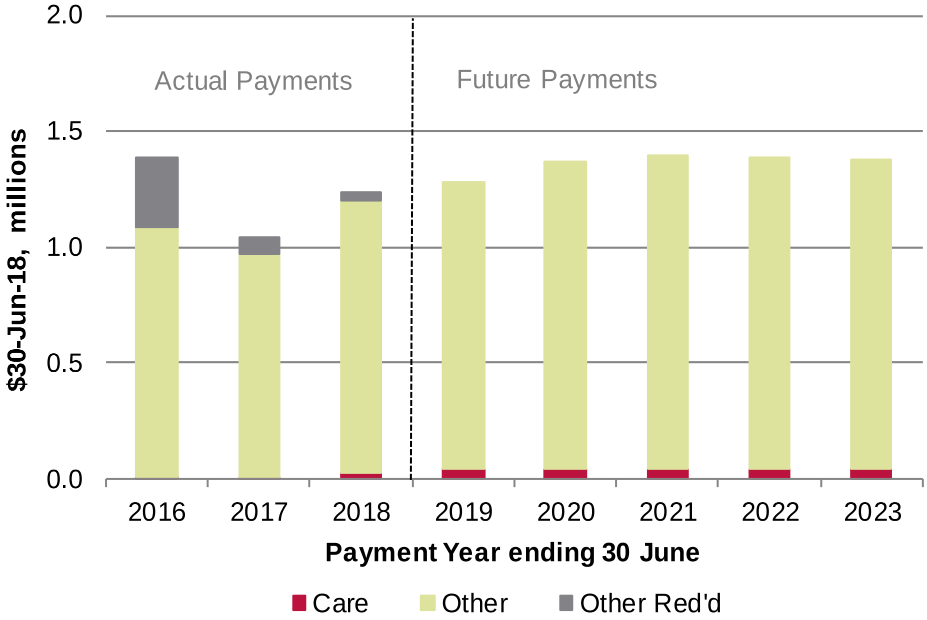


We estimate around $17.5 million will be paid in Income Support to Other Serious Injury claims in 2019. Future payments will generally reduce over time in line with expected mortality and retirement, although there is an increase between 2018 and 2019 as the majority of additional IBNR claims are assumed to emerge in the Serious Injury group at one year's duration from injury

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 ($Jun-18)

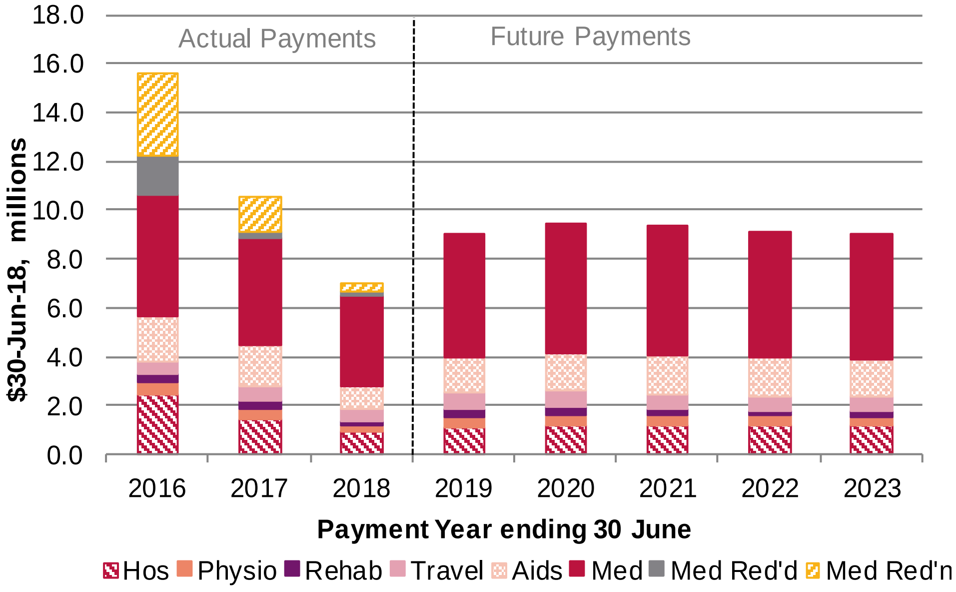


Other Serious Injury claims receive very little in care costs. We expect around $1.2 million in other payments in 2019 with an increase from the 2018 level due to IBNR claims.

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 ($Jun-18)

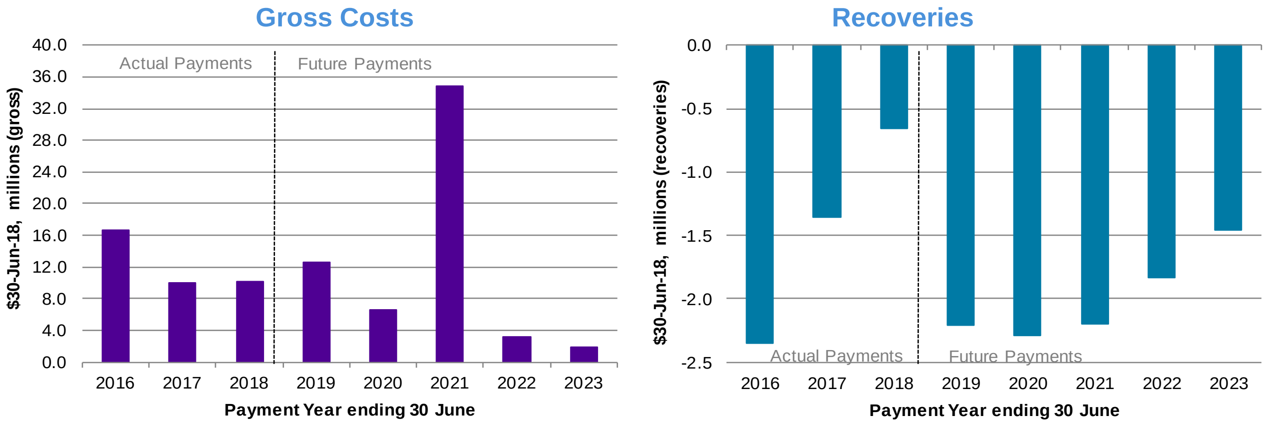


We expect treatment and related payments of $8.4 million in 2019 for ongoing claims, after lower costs in 2018. Payments increase in 2019 due to IBNR claims offset by reductions in line with mortality.

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 ($Jun-18)



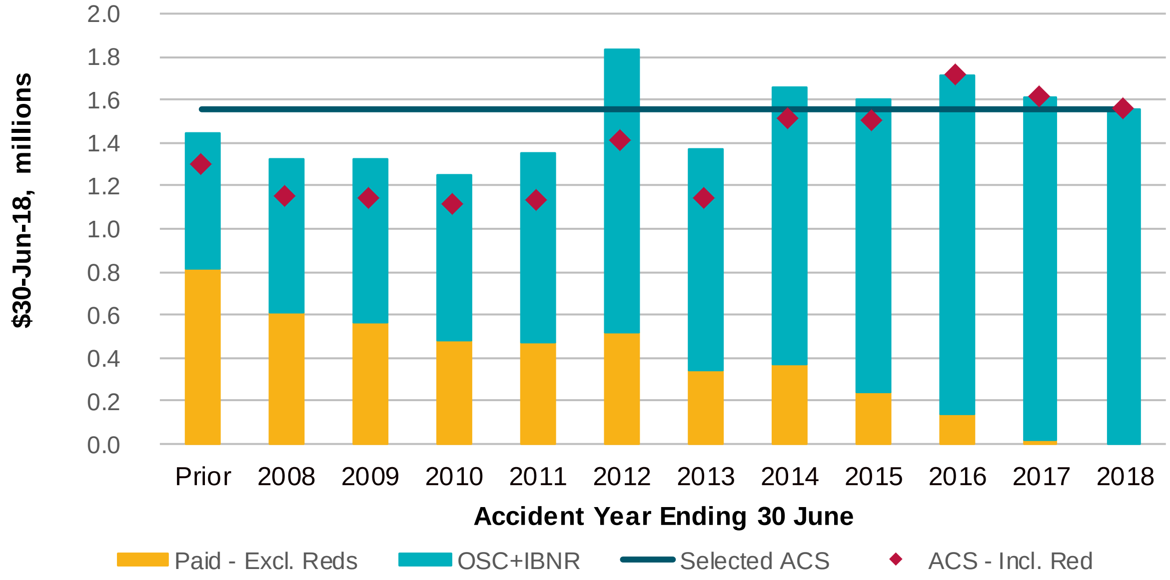
Our future projections include:

- Lump sum benefits of $48.3 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 2021.
- Legal and investigation costs of $17.9 million
- Recoveries of $11.6 million.

9.5.7 Overall Results and Implications

Figure 9.16 shows the net ultimate average claim size (inflated to 30 June 2018 values) across all Other Serious Injury claims.

Figure 9.16 – Average Size by Payment Type



The total selected average size is just below $1.6 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. It is not surprising that pre 2014 accident years that have a lower average size are also the periods that have higher claim numbers as shown in Figure 4.5. More detail on the selections underlying this average size can be found in Appendix A.6.4.

As discussed in section 4.2, unexpected Serious Injury claim numbers from older accident periods have continued to emerge over the last six months which has placed a strain on the Other Serious Injury valuation. While there have been some claims removed from these periods, these have typically been lower value claims so the overall impact on the liability has been an increase.

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 Jun-18 from Dec-17 Valuation	Jun-18 Estimate on Dec-17 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 months to Jun-18	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	262.7	259.9	-2.8	-1.2	4.1	2%
2005/06 - 2012/13	572.0	589.7	17.8	-9.3	-8.4	-1%
2013/14 - 2014/15	206.6	227.4	20.8	-2.3	-18.5	-9%
2015/16 - 2017/18	375.1	383.0	7.9	0.3	-8.2	-2%
Total	1,416.4	1,460.0	43.6	-12.5	-31.1	-2%

[1] 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 2006 accidents – claims that were removed from the Serious Injury valuation were concentrated in older accident periods, leading to a net release of $4.1 million
- 2006-2013 accident periods – the net change in Serious Injury claim numbers was close to neutral, however the higher average claim size on the newly recognised claims (relative to those claims removed) resulted in a strengthening of $8.4 million for this group
- 2014-2015 accident periods – the continued stronger than expected emergence of Serious Injury claims (discussed in section 4.2) has led us to increase ultimate claim numbers for these periods, leading to a strengthening of $18.5 million
- 2016-2018 accident periods – this is largely related to the number of new Serious Injury claims for the 2016 accident year having a higher average size than allowed for in our IBNR. Changes to our ultimate claim number assumptions for Other Serious Injury claims (increase of two) and Severe Traumatic claims (reduction of 0.5) were largely offsetting. The overall strengthening for this cohort was $8.2 million.

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

Table 9.4 – Components of Actuarial Release: Serious Injury Claims

Release (strengthening) due to	Severe Traumatic Injury	Other Serious Injury	Total	
	$m	$m	$m	$m
AvE payments in six months				12
Difference from projected liability				
Changes to Valuation Basis				
Claim Numbers[1]	23	(77)	(55)	
Change in Ongoing Status	0	5	5	
Basis and Assumption Changes	2	4	6	
Subtotal				(44)
Total				(31)

[1]Net effect of deceased, removed, newly identified and IBNR claims

As discussed above, the majority of these movements are related to the net movement of Serious Injury claim numbers ('known' and 'potential') and associated IBNR responses to this experience. Of the $11 million release associated with changes to ongoing status and assumptions, around $7 million is due to three claims that ReturnToWorkSA no longer have any liability for (one redeemed, one deceased and one transferred to self-insurance).

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 on 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.

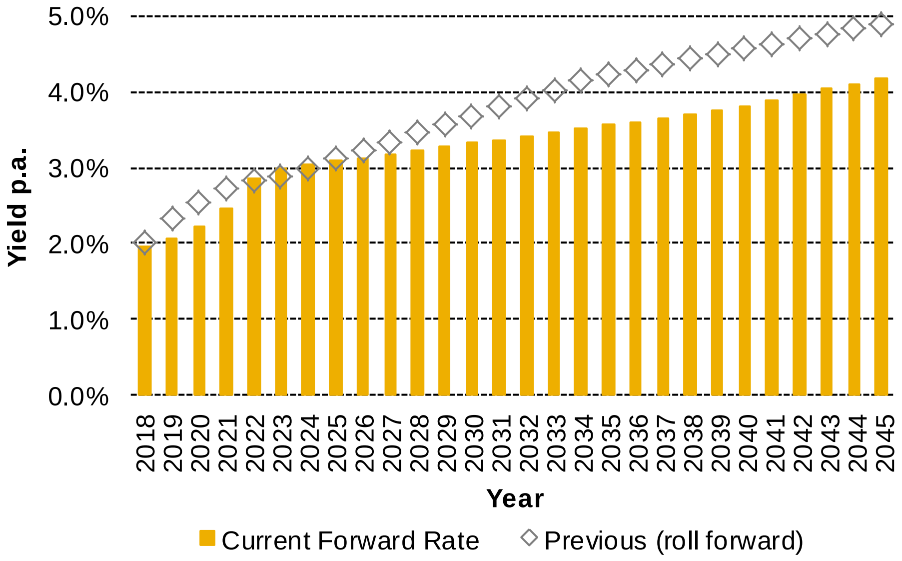
The resulting forward rates are applied to the projected cash flows for each future period. When discounting using forward rates, the relevant rates must be 'chained' together, for example a payment at the end of year three is discounted using the product of the first, second and third year forward rates.

10.1.2 Current Assumptions

Discount rates at June 2018 are lower than at December 2017 at all durations longer than eight years. At shorter durations, the movement is less consistent, with some bonds above and others below their equivalent bonds six months ago. We have assumed a long-term rate of 4.5%, which is 0.5% lower than assumed at December 2017, based on the yield of the longest date bond (March 2047).

Figure 10.1 shows the current forward rates, and compares these to the corresponding forward rates implied by the previous valuation (i.e. rolled forward to the current valuation date). This shows that the discount rates have decreased for most durations, with the exception of rates between 2022 to 2024 which have increased above the previous valuation. The equivalent single discount rate has decreased from 3.7% p.a. at 31 December 2017 to 3.3% p.a. at 30 June 2018.

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.

In summary, our assumptions at the current valuation are:

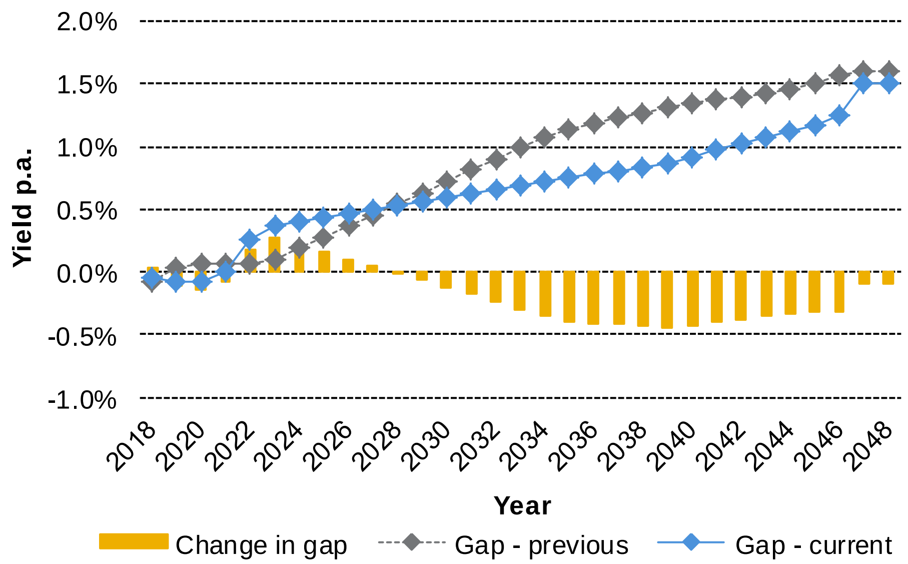
- Wage Price Inflation has been assumed to be 2.0% p.a. for the coming year, increasing to 2.6% after five years. This is a reflection of both current forecasts and the current low wage growth environment.
- Wage Price Inflation assumptions gradually increase from this level to 3.0% over the next 23 years, after which a gap of 1.5% p.a. is maintained between Wage Price Inflation and forward discount rates. The long term gap is 10 basis points below the December 2017 valuation, as the decrease in the yield curve could not be fully offset by lower inflation assumptions.

- Average Weekly Earnings (AWE) is set as equal to Wage Price Inflation for the coming year. This is lower than the previous valuation, where the initial gap between AWE and Wage Price Inflation was 0.25%. From 2023 onwards, AWE is set to 0.25% above Wage Price Inflation, consistent with the long-term assumption from our previous valuation.
- CPI inflation has been set at 2.5% p.a. for all future durations. This is consistent with the mid-point of the Reserve Bank's targeted range of 2-3% p.a.

Overall, our resulting projected wage inflation is lower than at the previous valuation.

The combined impact of the above movements in adopted inflation and discount rates is shown in Figure 10.2.

Figure 10.2 – Gap between Adopted AWE and Discount Rates



Between 2018 and 2021, the 'gap' is negative and lower than at the previous valuation, while between 2022 and 2027 the gap has increased. Both of these periods reflect the movement of the yield curve in the past six months. For cashflows beyond 2027, there is a decrease in the 'gap' between inflation and discount rates.

The impact of this change is to increase 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.

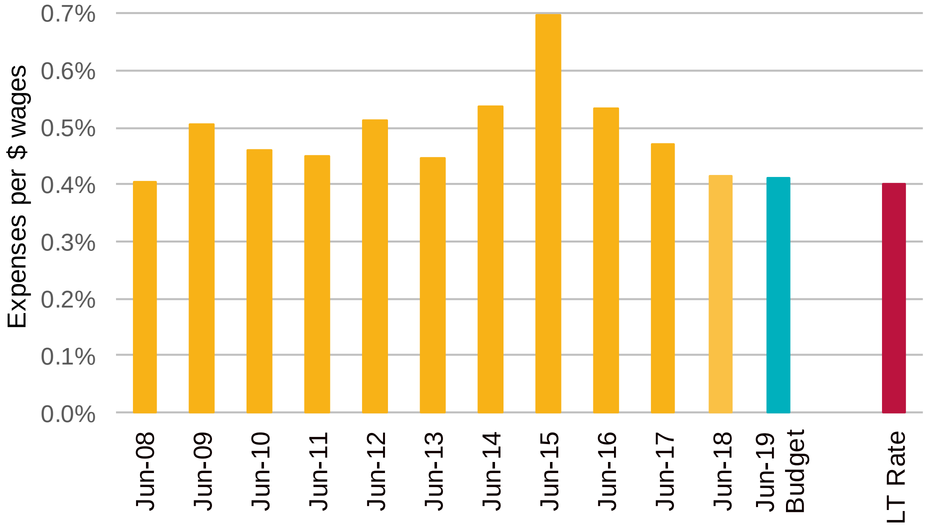
We have made assumptions about superimposed inflation for some payment types, and on the timing of the application of inflation. These assumptions are detailed in Appendix C.

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 budgeted figure for 2018/19 and the expected long term expenses of 0.4% of covered wages.

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 been reducing over the last few years and will continue to reduce until a stable state is reached; the budget for 2018/19 financial rate is now close to the anticipated long term expense rate from the reform costing work.

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

(i) For Serious Injury claims we express claim handling expenses as a percentage of outstanding claims – the allowance is 8.5%, unchanged from the previous valuation.

(ii) For Short Term Claims, we had previously estimated an explicit dollar value expense allowance for transitional claims, on the basis that they were expected to run-off by the end of 2019. At this valuation we have kept the previous dollar expense allowance from December 2017 but converted this to a percentage of cash flows to allow us to hold expenses for as long as it takes for these transitional claims to run off, (which is longer than previously expected). For simplicity, we have selected the same percentage costs as the RTW Act claims, 12.5% of gross claim payments.

(iii) For future Short Term Claims under the RTW Act, we use ReturnToWorkSA's expected long term expenses of 0.4% of wages, consistent with the costing of the new scheme, where the claims handling component equates to around 12.5% of gross claim payments, unchanged from our previous valuation.

Given the significant changes being undertaken by ReturnToWorkSA to implement the RTW Act, and the resulting changes in claimant profile over the next one to two years, it is expected that the expense loading could continue to move until a new steady state is reached.

The overall expense rate equates to 9.0% of gross outstanding claims, down from 9.6% at the previous valuation. The reduction is driven by a higher mix of Serious Injury Claims in the outstanding claims which have a lower expense rate compared to Short Term Claims.

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.

For this valuation, we have undertaken a partial review of risk margins. 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	Jun-18	Dec-17
Serious Injury	31.3%	31.3%
Short Term Claims		
IS + Redemption	14.5%	15.7%
Lump Sums	27.3%	23.8%
Legal + Investigation	28.2%	24.8%
Medical and Other Treatment	17.1%	18.2%
Recoveries	20.7%	21.6%
Total (Undiversified)	28.8%	28.3%
Total (Diversified)	**24.6%**	**24.3%**
Diversification	14.6%	14.2%

The movements in the CVs since our previous valuation are:

- Serious Injury is unchanged, and has the highest CV due to the high level of uncertainty in Serious Injury claim numbers and the risks of long term cost escalation under the lifetime benefit structure.

- IS and Redemption has decreased due to lower external systemic risk as a result of improving employment conditions and more certainty around the legal interpretation of the reforms.
- Lump sum has increased due to increased modelling uncertainty with the slowdown in the WPI process and changes to the payment pattern. In addition, there is higher external systemic risk due to high disputation rates and changes to the referral and review process.
- Medical and Other Treatment has decreased, as there is less uncertainty in the modelling of liabilities with the boundary on treatment benefits for transitional claims now operating
- Recoveries have reduced due to lower uncertainty with parameter selections as more experience from the RTW Act accident periods emerge.
- Legal and Investigation has increased due to the high dispute activity currently in the scheme resulting in higher parameter selection uncertainty. In addition, the high number of open disputes for transitional claims and the extended time to resolution results in a higher risk of adverse cultural change.
- The diversification benefit has increased due to changes in the mix of liabilities at this valuation.

Based on a coefficient of variation of 24.6% and our modelled distribution (which is a blend between a normal and lognormal distribution), we recommend a risk margin of 15.0% at a 75% probability of sufficiency. This is unchanged from our previous valuation, despite the slight increase in the underlying CV.

As described in Section 2.1.1 the current 75% probability of sufficiency risk margin would not be sufficient to cover the increase in liabilities if the *Mitchell* precedent is maintained on appeal.

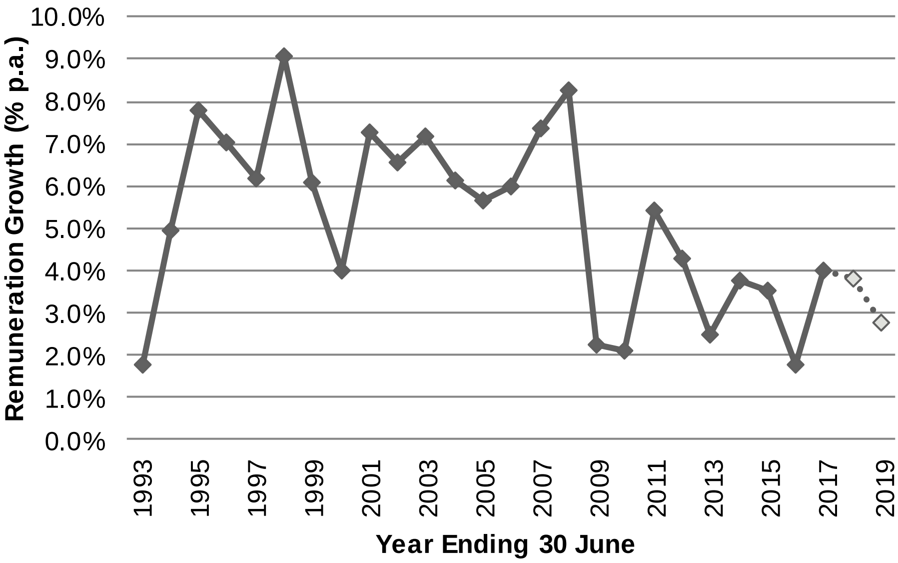
10.6 Non-Exempt Remuneration

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 $27.9 billion for 2017/18, noting that it is still subject to estimation as premium returns are yet to be completed for the current year. 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 has since reduced again towards levels seen during the GFC.
- ReturnToWorkSA is currently projecting 2018 remuneration growth to be 3.8%, higher than previously projected at December 2017 (3.6%) but lower than the 4.0% in the 2017 financial year (which was the highest since 2012). ReturnToWorkSA's projection of growth in 2019 is slightly above 2.5% which while, an increase of 0.5% from previously projected at December 2017 is still very much on the low side of 'normal' conditions.

All else equal, the low wages growth puts pressure on the scheme's breakeven premium rate, unless claims cost growth can also be constrained.

11 Valuation Results

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

- The central estimate of outstanding claims as at 30 June 2018
- 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 31 December 2018 and 30 June 2019
- Reconciliation of results with 31 December 2017 projections.

As stated earlier, all the results in this section are shown on the basis that the *Mitchell* decision will be overturned on appeal. Refer to Section 2.1.1 for more details.

11.1 Outstanding Claims – Central Estimate

Our central estimate of the outstanding claims by entitlement type as at 30 June 2018 is set out in Table 11.1. This liability relates to all claims which occurred on or before 30 June 2018 and includes the impact of updated economic assumptions.

Table 11.1 – Outstanding Claims by Entitlement Type

Entitlement	Estimate of Outstanding Liability			% of Net
Group	Short Term Claims	Serious Injuries	Total	Cent Est
	$m	$m	$m	
Income	120	350	470	21%
Redemptions	0	0	0	0.0%
Lump sums	253	59	312	14%
Worker legal	36	9	45	2%
Corporation legal	33	9	43	2%
Medical	107	494	602	26%
Hospital	18	95	113	5%
Travel	4	52	57	2%
Rehabilitation	14	38	51	2%
Physical Therapy	7	39	46	2%
Investigation	2	1	3	0.1%
Other (including Care)	9	367	377	17%
Common law	3	0	3	0.1%
LOEC	1	0	1	0.0%
Commutation	2	0	2	0.1%
Gross Liability	609	1,514	2,123	93%
Recoveries	-25	-28	-53	-2%
Expenses	76	129	205	9.0%
Net Central Estimate	660	1,614	2,275	

The outstanding claims liability before recoveries and expenses is estimated to be $2,123 million. The net central estimate, allowing for recoveries and including an allowance for claims handling expenses, is $2,275 million.

Table 11.2 details the outstanding claims result by accident year.

Table 11.2 – Outstanding Claims by Accident Year

Accident Year	Estimate of Outstanding Liability Short Term Claims	Serious Injuries	Total	% of Net Cent Est
	$m	$m	$m	
Pre Jun-05 Years	27	263	290	13%
Jun-06	4	50	55	2%
Jun-07	5	84	90	4%
Jun-08	6	61	67	3%
Jun-09	7	52	58	3%
Jun-10	8	95	103	5%
Jun-11	10	83	93	4%
Jun-12	12	78	90	4%
Jun-13	15	104	118	5%
Jun-14	20	115	135	6%
Jun-15	31	131	162	7%
Jun-16	83	135	218	10%
Jun-17	141	130	271	12%
Jun-18	241	134	375	16%
Gross Liability	609	1,514	2,123	93%
Recoveries	-25	-28	-53	-2%
Expenses	76	129	205	9%
Net Central Estimate	660	1,614	2,275	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

	Serious Injuries	Short Term Claims	Total
	$m	$m	$m
Inflated	3,867	710	4,577
Inflated and Discounted	1,614	660	2,275
Ratio	42%	93%	50%

11.2 Provision for Outstanding Claims

Table 11.4 sets out the components of our recommended provision at 75% probability of sufficiency, $2,616 million.

Table 11.4 – Recommended Balance Sheet Provision

	Central Estimate	Risk Margin	Recommended Provision
	$m	$m	$m
Gross Claims Cost - Serious Injuries	1,514		
Gross Claims Cost - Short Term Claims	609		
Claims Handling Expenses	205		
Gross Outstanding Claims Liability	2,328	349	2,677
Recoveries	-53	-8	-61
Net Outstanding Claims Liability	2,275	341	2,616

11.3 Movement in Liability

Our central estimate is $113 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 Dec-17	1,982	-52	191	2,121
Plus liability for claims incurred in the period	215	-5	24	235
Less Expected Payments to Jun-18	193	-6	26	213
Plus Interest (unwinding of discount)	19	0	1	19
Liability Projected from Previous Valuation	2,024	-52	190	2,162
Current Valuation	2,123	-53	205	2,275
Difference	99	-1	15	113

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. This step also includes the impact of changes in the timing of lump sum payments, where slower than expected lump sums lead to an increase in the remaining liability.
- 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 Jun-18	Actuarial Release [2]
	$m	$m	$m
Liability at Dec-17 Valuation	2,121		
Projected Liability at Jun-18 (from Dec-17 valuation)	2,162		
Claims Movement - Short Term Claims	36	-23	-13
Claims Movement - Serious Injury	47	-12	-35
Impact of Change in economic assumptions	29		
Recommended Liability at Jun-18	2,275		
Total Actuarial Release			-48

[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 June 2018

The actuarial release over the period is a strengthening (increase) of $48 million. Table 11.7 shows the actuarial strengthening by entitlement type.

Table 11.7 – Actuarial Release by Entitlement Type

Entitlement Group	Short Term Claims[1]	Serious Injury Claims[1]	Total Actuarial Release [1]	Release %
	$m	$m	$m	%
Income	3.9	-30.3	-26.5	
Redemptions	0.1	-0.4	-0.3	
Combined	*4.0*	*-30.7*	*-26.7*	*-6.1%*
Lump Sums	-0.3	-4.7	-5.0	-1.8%
Worker legal	-8.2	-0.9	-9.0	-24.3%
Corporation legal	-1.5	-0.5	-2.0	-4.8%
Investigation	-0.3	0.1	-0.2	-6.7%
Medical	-5.7	-5.5	-11.2	-1.9%
Other	1.1	6.2	7.3	1.9%
Hospital	-0.1	3.2	3.0	2.7%
Travel	0.0	-0.5	-0.5	-0.9%
Physical therapy	0.0	0.0	0.1	0.2%
Rehabilitation	5.4	2.6	7.9	14.3%
Common Law	0.1	0.0	0.1	5.3%
LOEC	0.0	0.0	0.0	0.3%
Commutation	-0.5	0.0	-0.5	-21.3%
Gross Liability	-5.9	-30.7	-36.6	-1.8%
Recoveries	1.6	-0.4	1.2	-2.2%
Expenses	-9.0	-3.8	-12.9	-6.8%
Net Central Estimate	-13.3	-34.9	-48.3	-2.2%

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

The major factors contributing to the $48 million actuarial strengthening at the current valuation are:

- For **Short Term Claims**, the $13 million actuarial strengthening comprises:
  - A release of $4 million for income support and redemptions, which is due to a combination of improving return to work experience and lower than expected payments.
  - An increase of $9.7 million for legal payments to reflect the high number of open disputes and slower resolution, as well as the high number of legal matters outstanding in the Supreme Court
  - An increase of $5.7 million for medical payments to reflect medical report costs linked to the WPI process increased
  - A decrease of $5.5 million for the remaining benefits, primarily driven by lower utilisation of rehabilitation and 'other' services.
  - A $1.6 million release for recoveries, reflecting additional collections in the period
  - A $9 million strengthening on claims handling expenses due to the slower than expected run off of transition claims and disputes.
- For **Serious Injury claims**, there was an overall strengthening of $35 million, due to:
  - Net changes in Serious Injury claim numbers (including IBNR claims) increasing the liability by $55 million, as new claim numbers from the transition cohort continue to be higher than expected
  - Changes in the status of already known Serious Injury reducing the liability by $5 million
  - Changes in valuation basis changes releasing $6 million

- Lower than expected payments (largely related to lump sum timing) resulting in a release of $12 million
- A $4 million strengthening on claims handling expenses.

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 increased the central estimate by $29 million.

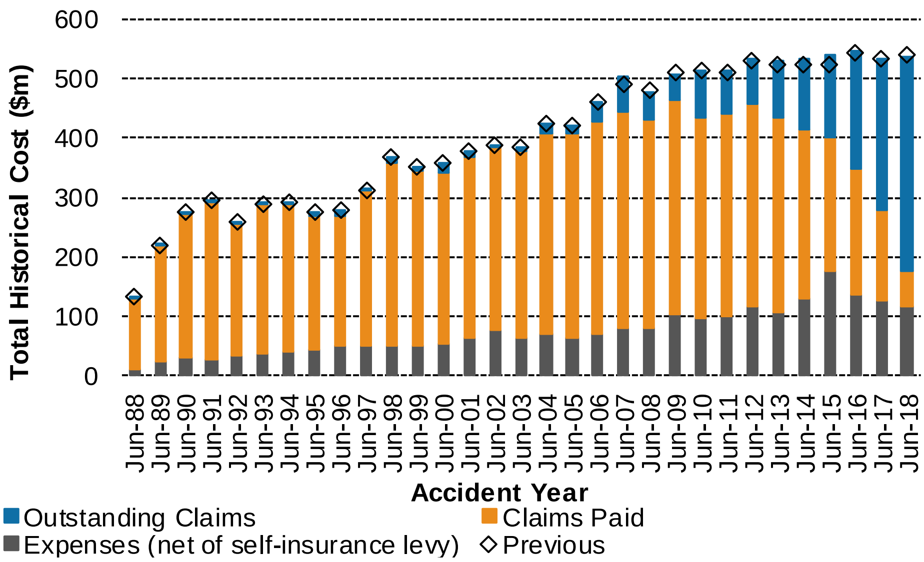
As discussed in Section 10.1 there have been decreases in discount rates at long durations, an event which is outside ReturnToWorkSA's control, which has led to this increase in the OSC liability.

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 2018.

Figure 11.1 summarises the currently estimated historical costs for each year since the scheme began. As this shows, commencement of the RTW Act has acted to contain the cost for recent accident years into the $500 million to $550 million range, breaking the strong upward trend seen in the lead up to 2010. Scheme expenses were particularly high in 2015 as a result of additional transition related expenses. In general the hindsight cost estimates are similar to the previous valuation estimates.

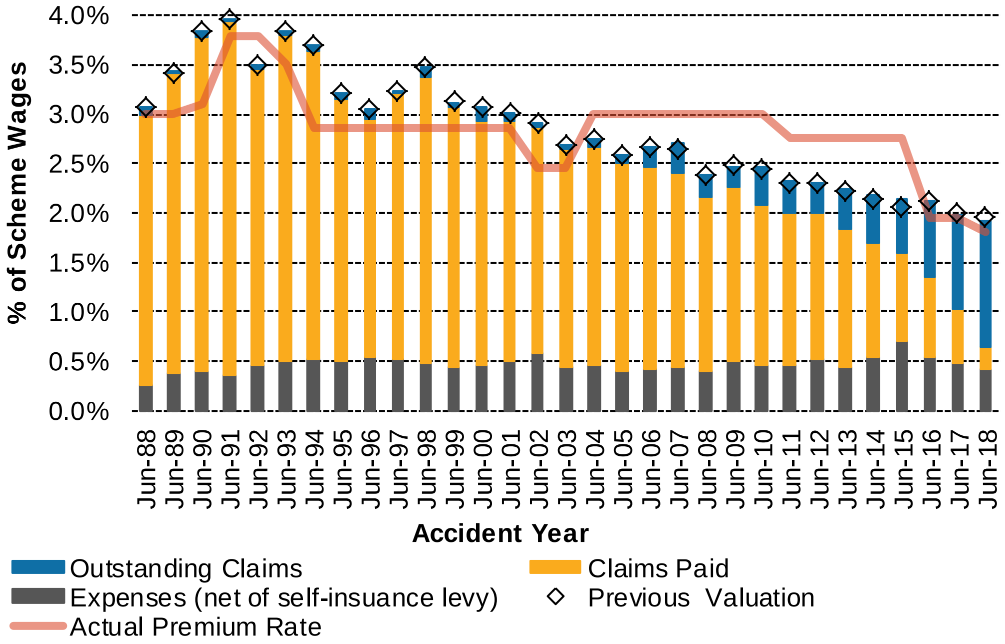
Figure 11.1 – Historical Cost Discounted to Accident Year



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 levyable 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 since 2011 the costs are lower again, as claims had less opportunity to remain on long term benefits
- The current estimate of the BEP for the 2018 accident year is 1.93%, down from 1.99% for the 2017 year, which is due to a combination of lower expenses and improvements in RTW.
- Scheme expenses were relatively high from 2014 to 2016, and particularly high in 2015, as a result of additional transition related requirements. 2017 and 2018 scheme expenses are lower than 2014-2016, and ReturnToWorkSA expects to see some further reduction as transition related activities are completed.

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 2018 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			
	Jun-18 to Dec-18	Dec-18 to Jun-19	Jun-19 to Dec-19	Dec-19 to Jun-20
	$m	$m	$m	$m
Income Support & Redemption	61.9	62.6	63.5	64.1
Medical	30.3	30.7	32.1	32.3
Lump sums	45.8	34.4	39.1	45.8
Rehabilitation	6.3	6.4	6.7	6.8
Physical Therapy	4.6	4.7	4.8	4.8
Hospital	8.5	8.6	9.0	9.1
Worker legal	6.6	6.4	6.3	6.2
Other	7.2	7.3	8.3	8.4
Corporation legal	9.9	10.0	9.1	9.2
Travel	2.6	2.7	2.8	2.8
Investigation	0.9	0.9	1.0	1.0
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	-5.3	-7.3	-8.3
Net Claims Cost - Total	180.3	170.0	175.9	182.8
Serious Injuries (net)	34.1	23.6	25.0	24.6
Short Term Claims (net)	146.2	146.4	150.8	158.2

Cash flows over the next two years are expected to remain relatively stable, with the next half-year a little bit higher to catch up on the lower level of lump sum payments in the June 2018 half-year.

11.6 Projected Outstanding Claims

Table 11.9 shows the outstanding claims projected to 31 December 2018 and 30 June 2019. We note the payments shown here are based on that 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 at 31 December 2018 and 30 June 2019

	Half year ending	
	Dec-18	Jun-19
	$m	$m
Provision at Period Start	2,616	2,686
Less Risk Margin	341	350
Central Estimate at Period Start	2,275	2,336
Plus Additional Liability Incurred in Period	240	244
Less Expected Payments in Period	-202	-191
Plus Interest (unwind of discount)	23	24
Projected Central Estimate at Period End	2,336	2,413
Plus Risk Margin	350	362
Projected Provision at Period End	2,686	2,775

We project the central estimate for the net outstanding claims liability at 31 December 2018 to be $2,336 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 July 2018 to 31 December 2018. The corresponding provision at a 75% probability of sufficiency is $2,686 million.

The projected increase to 31 December 2018 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 31 December 2017 valuation we projected an additional claim cost liability of $210 million would be incurred from claims arising in the January to July 2018 half-year. Our current projection for the ultimate value of this liability is $209 million, a minor decrease of 0.4%. Changes in economic assumptions are the main reason for this increase.

Table 11.10 – Comparison of December 2017 Projections to Current Valuation

For period 01 Jan 2018 to 30 Jun 2018		
Incurred Claims Liability ($m, excl. expenses):		Difference
Projected in Dec-17 Valuation	210	
Incurred (current valuation)	209	-0.4%

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, transition to SAET, 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:

Table 12.1 – Economic Scenarios

	Stronger	Weaker
Unemployment	Down to 4%	Up to 8%
Wage inflation	4% pa	2% pa
Investment earnings	7% pa	2% pa
Real 'Gap'[1]	3%	0%

[1] Difference between inflation and discount rate

A scenario where the economic conditions return to pre-GFC levels is broadly comparable to the stronger economic scenario.

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

	OSC Impact $m	OSC Impact %
30 Jun 18 OSC estimate (Including risk margin at 75% POS)	2,616	
Strong Economic Scenario (3% gap between inflation and discount rate)	-580	-22%
Weak Economic Conditions (0% gap)	+152	+6%

As this suggests, economic conditions are still currently unfavourable for scheme performance relative to long term historical norms. If conditions do improve the implications for both funding and premiums are favourable.

12.3 Legal Risk Scenarios

As discussed in section 3, there have been high numbers of disputes in the scheme at various times (and the count of open disputes is again growing) and a number of key provisions of the RTW Act are subject to adverse legal precedent which is under appeal. The table below indicates the sensitivity of results to three 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 are likely to happen together.

Table 12.3 - Legal Sensitivities

	OSC Impact $m	OSC Impact %
30 Jun 18 OSC estimate (Including risk margin at 75% POS)	2,616	
Mitchell precedent is maintained on appeal	>$300m	>12%
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.	+188	+7%
Restrictions on multiple assessments ('top ups') do not work as expected.	+133	+5%

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.

There is improvement potential that would measure in the tens of millions of dollars if favourable resolution trends occur and the number of disputes drops as a result.

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.

In order to illustrate the type of changes that might occur we have looked at the sensitivity of the OSC to:

- Reduced effectiveness of claim managers in returning people to work, continued improvement in return to work outcomes that mirrors the most recent average payment experience and scenarios around late reported incapacity claims
- Higher access to surgery-related benefits
- Higher written report costs due to ongoing WPI assessment and dispute activity
- Sustained higher legal fees, reflecting the current number of disputes and claims progressing to later stages of the resolution process
- Increase in claims handling expense rate for RTW Act accidents
- Reduction in First Paid and Economic Loss lump sum payments
- Differences in future lump sums.

Table 12.4 - Short Term Claim Sensitivities

	OSC Impact	
	$m	%
30 Jun 18 OSC estimate (Including risk margin at 75% POS)	2,616	
Post 1 July 15 Claims		
Claims experience mirrors Sep-15 experience (a high cost injury quarter)	+10	+0%
Lower number of active claims getting to 2 years (12% reduction) and lower second and third year PPACs (earlier exits and more partial return to works)	-11	-0%
Double the number of late reported IS claims than currently allowing	+5	+0%
Treatment Costs		
Surgery costs emerge more than expected, approximately double the current allowance	+20	+1%
Lower vocational rehabilitation spending in line with the level of payments in the last six months	-2	-0%
Higher cost of written reports in line with spending levels in the last six months.	+5	+0%
Legal Fees		
"Non-contract" legal fees remain high for an additional two years due to high number of matters in the Supreme Court	+11	+0%
Higher average cost of legal fees for transition claims	+10	+0%
Expenses		
Higher expense rate for Short Term Claims due to expenses not reducing as much as gross claim costs	+18	+1%
Lump Sums		
Recent reduction in lump sum payments is due to First Paid and Economic Loss lump sum numbers reducing by 15%	-41	-2%
Economic Loss lump sums emerge 20% higher than expected	+30	+1%

These scenarios, along with the WPI scenarios in Table 12.3, demonstrate that the robustness of WPI assessments is currently the key driver of uncertainty for Short Term Claim liabilities.

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

	OSC Impact	
	$m	%
30 Jun 18 OSC estimate (Including risk margin at 75% POS)	2,616	
Ultimate claim numbers do not reduce from 2008-2013 levels on the Other Serious Injury cohort	+160	+6%
95% of WPI disputes are suceessful, of which 90% become serious injury claims (currently assuming 10% dispute success rate and 10% serious injury rate)	+562	+21%
Serious Injury application disputes have a 50% success rate (currently 21%) and claims under RTW act ultimately emerge similar to the average of the 2014/15 years	+151	+6%
Unpaid care on EnABLE cohort ceases immediately and is replaced with paid care	+269	+10%
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).	+426	+16%
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.	+361	+14%
Superimposed inflation is 1% p.a. lower than assumed for medical and care.	-263	-10%
No increase in utilisation of Care benefits after age 65	-133	-5%
Twice the additional allowance for utilisation of Care benefits after age 65	+133	+5%

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 OSC.

We emphasise that there is significant uncertainty around ultimate claim numbers, from the following sources:

- If there is no improvement in Serious Injury numbers for RTW Act periods, there will be an increase of around $160 million in the OSC provision.
- If the success rate on Serious Injury application disputes is roughly twice the level allowed for in our IBNR, the increase in the provision would be around $150 million.
- Based on the findings of ReturnToWorkSA's claims reviews, we have only allowed for a small percentage of WPI disputes to ultimately result in additional Serious Injury claims, as the majority of these disputes are seeking to rely on key legal precedents (such as *Mitchell* and *Preedy*) to achieve increases in the assessed WPI. If these key legal precedents do not resolve in ReturnToWorkSA's favour, the implication is that many claims would reach the Serious Injury threshold. If this was to occur, and assuming the impacts continue into RTW Act periods, the impact on the provision would be multiple hundreds of millions of dollars.

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

12.6 Key Uncertainties

A number of current factors mean there is more uncertainty than usual in our central estimate – primarily the uncertainty surrounding the impact of the changes introduced by the RTW Act.

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 behaviours of its participants. In particular, recent decisions have gone against ReturnToWorkSA's interpretation of the WPI assessment rules and if maintained would lead to increases in the liability; these decisions are currently under appeal. On current timing, this risk is likely to remain for at least another year, and perhaps longer.

  As noted, all of our valuation work has been undertaken on the basis that the *Mitchell* decision will be overturned on appeal. This means there is no allowance for *Mitchell*-related costs in the central estimate projection, other than legal costs. More information on this uncertainty is found in Section 13.2.1. Importantly, we note that if the *Mitchell* decision were to be upheld, the revised central estimate would exceed the current recommended provision at the 75% probability of sufficiency level.

- **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 new lump for future economic loss payable to Short Term Claims, means there will be increasing 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** – as these claims have benefits for life, the biggest risk for this group are 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:

  - **Life expectancy** – the future life expectancy for Serious Injury claims 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 (for example, as the NDIS scales up in the next few years).

  - **Ultimate numbers of claims** – there are several areas of uncertainty in relation to claim numbers, including: the ultimate number of top-ups that are yet to emerge due to legislation changes, the impact the removal of WPI top-ups will have on ultimate claim numbers, and the number of outstanding Serious Injury application disputes and other WPI disputes that ultimately meet the 30% WPI threshold.

- **Return to work** – there have been improvements in return to work outcomes for claims managed entirely under the RTW Act, and it is likely that this will improve further still if changes in the scheme culture can be sustained. Counter to this, there continues to be significant legal involvement on transition claims, and if this carries through to the RTW Act cohort the sustainability of recent improvements could be at risk.

- **Compensability and claim acceptance** – there was thought to be potential for further reductions in new claim numbers following changes to compensability rules, but current precedent suggests this is not going to eventuate. Regardless, it will be crucial to ensure that past closed claims cannot come back onto benefits – for example, to ensure that past Work Capacity discontinuances or claims which have been discontinued at the two year boundary do not start new claims or 'restart the clock' following a short return to work.
- **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 are again increasing quickly, and more claims are moving into the later stages of the dispute resolution process.

Even though the RTW Act provisions commenced on 1 July 2015, 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, based on our and ReturnToWorkSA's interpretation of the intent of the Act. Over time, our basis will further reflect the developing post-reform experience, and it is possible that the experience could differ, perhaps 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 Mitchell Decision and other Supreme Court matters

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

Along with *Mitchell*, there are an unusually high number of other cases on appeal to the Supreme Court (or awaiting leave to appeal) and until these cases are resolved there will be uncertainty as to the financial costs which eventuate under the RTW Act benefit package.

Our assessment of the outstanding claims liability at June 2018 assumes the *Mitchell* precedent is overturned on appeal. If this is not the case, the outstanding claims liability would be materially higher than shown. This applies particularly to the Serious Injury and income support benefit types; we also expect that claimants would be incentivised to stay on benefits for longer to help establish higher WPI scores through ‘add ons’ to the original injury if *Mitchell* is maintained.

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. Its key features only came into effect from 1 July 2015, and legal testing of its implementation is still occurring and likely to take a number of years to complete.

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.

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 over the last ten years.

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.