Scheme Actuarial Valuation as at 30 June 2021

ReturnToWorkSA

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.

finity

3 September 2021

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

Dear Mr McCarthy

Actuarial Review 2021 30 June

Enclosed is our report on the 30 June 2021 scheme actuarial valuation.

As demonstrated by the allowance we have made for the recent *Summerfield* case, the scheme currently faces a 'step change' increase in its annual running costs if this decision is not overturned on appeal (or else dealt with via legislative change). We emphasise that our allowance for *Summerfield* impacts is likely to move higher or lower over time, depending on the actual outcome of the appeal once it becomes known (i.e. a successful appeal would lead to a lower allowance than is currently included, whilst a loss of the appeal would mean a higher liability estimate is required).

Furthermore, as has been the case now over a number of years there still continues to be a larger than expected number of claimants seeking to access the Serious Injury benefit package, many of whom are in dispute. This legal uncertainty around how WPI assessments should be undertaken, when combined with the large number of open disputes and slow rate of dispute resolution, means there is still a material risk to the valuation results that Serious Injury claim numbers will be higher than we have allowed. In the absence of a clear legal decision on how these legislative provisions should operate in practice, it is likely to be at least another two years, and perhaps longer, before there is any real likelihood that this will change.

More pleasingly, the 'early indications' of improving RTW outcomes noted at our last review have proven to be real. There do however continue to be other challenges emerging, in particular due to noise induced hearing loss claims and more claims commencing benefits for Income Support.

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

Yours sincerely

Andrew McInerney FIAA | Tim Jeffrey FIAA | Claire White FIAA

Sydney Level 7, 68 Harrington Street,
The Rocks, NSW 2000
T +61 2 8252 3300

Melbourne Level 3, 30 Collins Street,
Melbourne, VIC 3000
T +61 3 8080 0900

Auckland Level 5, 79 Queen Street,
Auckland, NZ 1010
T +64 9 306 7700

Glossary

Active Claim	A claim is regarded as 'active' in the valuation models if it had a payment in the relevant period.
Actuarial Release	A 'like with like' measure of how claims management activity has impacted on scheme financial performance since the previous valuation. See Section 13.3 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).
EnABLE	The internal claims management team at ReturnToWorkSA that manage Severe Traumatic Injury claims.
ER	Incentives for early reporting of claims, introduced in 2008.
IBNER	Incurred But Not Enough Reported – an allowance for cost growth on known claims in addition to the reported cost.
IBNR	Incurred But Not Reported – claims where the accident has occurred, but ReturnToWorkSA is yet to be notified.
IS	Income Support (also known as weekly benefits) payments.
NWE	Notional Weekly Earnings.
OSC	Outstanding claims liability.
PPAC	Payments per active claim.
PPCI	Payments per claim incurred.
RTW	Return to work.
RTW Act	The Return to Work Act 2014, which governs the scheme.
Serious Injury or Serious Injury claim	A claim that meets the definition of a "Serious Injury" under the RTW Act.
Short Term claim	A claim that does not meet the Serious Injury threshold.
WRCA ('old Act')	Workers Rehabilitation and Compensation Act 1986, the previous Act which governed the scheme.
WPI	Whole Person Impairment.

1 Executive summary

1.1 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 2021.

Our previous actuarial review was as at 31 December 2020, and was documented in a report dated 3 March 2021.

1.2 Scope of the review

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

The primary purpose of the June 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 uses this estimate in determining the provision for outstanding claims in its annual financial accounts.

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 Valuation approach

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

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

For this valuation a new section has been added to our report to summarise the cost estimates related to an important recent legal decision, "*Summerfield*" (explained further in the next section). In order to understand the underlying scheme experience and separately identify the impacts of the *Summerfield* decision, our valuation work has been split into two stages:

1. Baseline Valuation – what our liability would have been if not for the *Summerfield* decision.
2. Summerfield Valuation – the overall liability estimate we have recommended after including an allowance for the *Summerfield* decision.

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. Given the unusual nature of *Summerfield*, our normal approach has required modification to come up with the overall post-*Summerfield* risk margin that we have recommended ReturnToWorkSA should hold.

To be clear, the adopted risk margin loading has <u>not</u> been set at a level that would guarantee coverage of all potential additional costs if the *Summerfield* decision – or other key cases like it – is maintained on appeal. It is also worth observing that despite a number of apparently 'key cases' in relation to the operation of the RTW Act having resolved over recent years, new avenues of challenge to the way the provisions of the Act are applied have continued to emerge, in particular in relation to the operation of WPI assessments.

1.4 Return To Work Corporation of South Australia v Summerfield

On 11 March 2021 a decision was handed down by the Full Court of the Supreme Court of South Australia in the case of *Return To Work Corporation of South Australia v Summerfield*[1] *("Summerfield").* This decision substantially differs from ReturnToWorkSA's previously adopted position in relation to how key aspects of WPI assessments should be undertaken.

ReturnToWorkSA have applied for special leave to appeal the *Summerfield* decision to the High Court of Australia, which is the last avenue of appeal. We understand that an oral hearing in relation to the special leave application will occur, although it will not take place before October 2021. As such, the outcome of the appeal will not be known before the current valuation work is completed.

If the *Summerfield* decision is maintained then the key consequences as they relate to the actuarial valuation work are that:

- Assessed WPI scores will in some cases be higher, as a result of injuries being 'combined' to determine the WPI score.
- As a result of the higher WPI scores:
  - More claims will be assessed as Serious Injuries (SI). Claims assessed as SI will gain access to the legislated lifetime benefit package, and this will therefore lead to higher claim costs than would otherwise have been incurred.
  - Some claims may also gain access to additional permanent impairment lump sums.

The impact of higher WPI scores is very significant, given the legislative design of the RTW Act links the generosity of benefits to the injury severity as determined by the WPI score. The combination of (1) potentially very significant financial consequences, (2) limited historical claims information that is available to directly assess the financial impacts of the decision, and (3) the currently unknowable outcome of the appeal, make this an unusual impact that needs to be considered in the valuation work. Our approach to quantifying the potential financial impacts and determining the recommended central estimate and provision are explained in detail in Section 11.

1.5 COVID-19 impacts

Our valuation basis assumes that COVID-19 infections continue to remain low in South Australia and that there are no additional shutdowns of substance, further economic disruption or major impacts on business confidence.

The experience over 2020 and 2021 has been used to guide the setting of the valuation assumptions as to the claims experience in a COVID-19 impacted world; in doing this, when interpreting the recent claims experience we have been conscious to identify areas where the experience is not, or might not, be the best indicator of ongoing performance (for example where there was a large dip in claim numbers at the initial shutdown, and when hospital costs dropped as surgeries were restricted). Under this approach the valuation assumptions implicitly incorporate the impacts of 'COVID-19' to some extent.

While we have made assessments that we consider to be reasonable, it is impossible to estimate the impact of COVID-19 on ReturnToWorkSA's liabilities with any level of certainty at the current time. While the unique set of circumstances means there is more than the general level of uncertainty around the valuation outcomes, the observation that actual claims performance in 2020 and 2021 was overall better than in recent years helps give some confidence that under current infection rates any impacts should be at the low end of the range of potential impacts.

[1] *Return To Work Corporation of South Australia v Summerfield*, [2021] SASCFC 17, 11 March 2021

1.6 Scheme environment

In addition to the *Summerfield* decision and COVID-19 situation described above, recent developments which affect the scheme's operating environment and/or the liability estimate include:

- **Legal precedent**: the RTW Act continues to be tested through the scheme's dispute resolution processes, and clear and accepted implementation of a number of key legislative provisions is still not in place. The result is that there is still a range of circumstances where there is uncertainty about how and where the scheme's legislative boundaries will apply; as such, the real-world operation of the Act is still yet to be confidently known, and it is possible that more claims will access longer periods on benefits than has currently been projected. Of particular importance to our assessment are the provisions around WPI assessments, including how and when a claim is determined to be a Serious Injury.
- **Dispute resolution and appeals**: related to the above point, the number of open disputes remains high, and the resolution of disputes is slow. The slow resolution appears to be related to the fact that more claims are moving into the later stages of the dispute resolution process, including into appeal, following changes in the RTW Act that mean legal costs are no longer at risk until after the early stages of an appeal. This is lengthening disputes and increasing legal costs, and has led to higher non-claimant related costs such as medico-legal costs (see Section 4.4.3).
- **Evolution of the claims management model**: the claims management model continues to evolve, including proactive steps to support the earlier identification of Serious Injury claims, speeding up the WPI assessment process, ensuring eligibility decisions are made efficiently and appropriately, and additional focus on early and sustainable RTW. On the back of these activities we have seen clear signs that claim durations have been improving in the last 6-12 months.
- **Growth in Hearing Loss claims:** there has been very rapid growth in the numbers of Hearing Loss claims over the last three years, which appears to be the result of targeted provider activity. The last year has been the highest on record in terms of new claims, and the financial implications of this increase are growing (see Section 4.4.5).

1.7 Recent claim experience

The key features of the claims experience in the six months to 30 June 2021 were:

- For claims managed entirely under the RTW Act:
  - > Overall new claim numbers have been reducing again, which is more consistent with longer term claim frequency trends. Hearing loss claims are a key exception to this observation, as explained above.
  - > However, as an offset to this, the proportion of claims receiving at least two weeks of wage replacement benefits, which is the threshold to be included in our Income Support claims count, has continued to increase over time. This has been a key driver of increased claim costs over the last few years, and it has led to an increase in costs on new claims in the last six months.
  - > After a period of deterioration in RTW rates from late 2018 to early 2020, claim durations have clearly improved over the last six months, confirming the 'early indications of improvement' that were noted at the previous valuation.
  - > Further to the above point, we continue to pay close attention to the emerging WPI experience for the 2018 and 2019 injury years, where the deterioration in RTW outcomes two to three years ago led to more claims reaching the 104 week boundary for Income Support payments, as there is a risk that more claim reaching 104 weeks will result in more claims with higher WPI scores. To date we have not been able to draw any such conclusions, mainly because the slow resolution to lump sums and high level of dispute make this difficult to analyse. To be clear, we have not currently allowed for any

deterioration in WPI scores to occur, and if this occurred it would lead to further material increases in the claims cost through higher lump sums and/or more claims reaching the Serious Injury threshold.

> After slowing down in the years immediately after reform, lump sum payments have continued to speed up in the last two years and are now close to pre-reform patterns.

> The number of disputes per month has continued to rise, as the increase in lump sum activity has also increased dispute numbers. Further, more claims are progressing to the later stages of the dispute resolution process, as noted above.

- For transitional claims, there continues to be a much higher than anticipated level of activity across a range of areas: for example, newly commenced WPI assessments have continued at similar levels over time (which has led to a further extension of the Transition Project), and there has been no material reduction in new dispute numbers over the last two years. With the current rate of activity it will be several years before the transitional cohort is finalised (see Section 4.4.2).

  This continued ongoing assessment activity and high level of legal activity also appears to be leading to additional claims gaining access to the Serious Injury benefit package over time. Furthermore, the existence of such a large cohort of older claims that are still 'in the system' has exacerbated the financial consequences of the *Summerfield* decision.

- The level of Serious Injury activity (applications, disputes and new determinations) remains higher than expected, and has again resulted in an increase to our expected ultimate number of Serious Injury claims.

> There continues to be a 'tail' of late emerging new Serious Injury claims, as mentioned in the transitional claims section above, although over the past six months this has been at a reduced level. This experience is quite different from our expectation that most applications would have been made shortly after the cessation of Income Support. For transitional claims, this means new Serious Injury claims are still emerging many years after the end of Income Support.

> For fully RTW Act claims, ReturnToWorkSA has changed the claims management approach to identify 'likely' Serious Injury claims much earlier, which we view as a positive step.

This had led to a higher number of claims being identified for more recent accident years at earlier durations after injury; while we know there were conscious efforts to identify likely Serious Injury claims sooner, it is not year clear whether this is just a speed up in the identification, or partly a deterioration. Our current assessment is that it appears to be a combination of both – in particular, the 2018 accident year already has more claims identified than any of the preceding three accident years, suggesting that claim numbers will end up at a very high level for this accident year (see Figure 5.7).

For now we have not fully extrapolated this higher level of claims for 2018 into the more recent accident periods. This partially reflects a reluctance to rely just on a single accident year when setting our valuation assumptions, particularly given it is not fully developed and the identification pattern has also been changing. Secondly, it acknowledges the outcomes of a review by ReturnToWorkSA to identify reasons for higher than originally expected Serious Injury numbers – in short, there were a number of areas where 'tighter' decision making earlier in the life of a claim could have reduced the likelihood of some claims becoming Serious Injuries, and ReturnToWorkSA is now in the early stages of implementing these findings.

Underpinning our IBNR allowance is the assumption that the speed-up in the identification of Serious Injury claims in recent years will reduce the tail of claims identified well beyond the two-year Income Support cap. If this does not hold, or the late identification of Serious Injury claims for older years does not start to run off soon, there will be further material increases for both the outstanding claims liability and the breakeven premium rate for future years.

Overall, there continues to be a high level of uncertainty about how many Serious Injury claims will ultimately emerge, which is compounded by new areas of legal challenge over time. It remains possible that our estimates will prove to be too low, even without an adverse legal decision.

> Medical and treatment costs for Serious Injury claims have continued to generally be lower in the periods after initial treatment is completed. As previously noted, the only qualitative explanation we have received for this is that claimants "no longer need to look sick" to remain on benefits.

Total net claim payments in the six months were $11.6m (5%) lower than projected at the previous valuation, although we note that around $4.4m of this saving is attributable to a slowdown in provider payments that we expect will be paid in the next six month window. Most payment types had lower than expected payments, other than Legal costs which were again high.

1.8 Liability valuation results

1.8.1 Summary of results

Our central estimate of the scheme's outstanding claims liability for registered employers as at 30 June 2021 is $3,569m. This is a discounted (present value) estimate, net of recoveries and including allowance for future expenses. Adding a risk margin of 16.5% (increased from 14.1% previously) to produce a provision with a 75% probability of sufficiency, consistent with ReturnToWorkSA's policy, gives an outstanding claims provision of $4,157m, as shown in Table 1.1. The provision includes an allowance for future claims handling expenses equivalent to 9% of gross claim costs.

Table 1.1 – Recommended balance sheet provision

	Baseline Valuation	Additional cost due to Summerfield	Total
	$m	*$m*	*$m*
	(a)	*(b)*	*(a+b)*
Gross Claims Cost - Serious Injuries	2,142	438	2,580
Gross Claims Cost - Short Term Claims	785	-34	751
Claims Handling Expenses	282	28	310
Gross Outstanding Claims Liability	3,210	431	3,641
Recoveries	-72	0	-72
Net **Central Estimate** of Outstanding Claims Liability	3,137	431	3,569
Risk Margin	436	153	589
Recommended Provision	3,573	584	4,157

Table 1.1 indicates that the majority of the OSC liability relates to Serious Injuries. The balance will continue moving toward Serious Injury liabilities over time, particularly if lump sums continue to speed up and if the *Summerfield* decision is not overturned on appeal.

The risk margin loading is very high for a scheme of this size, reflecting the uncertainty related to the *Summerfield* appeal as well as the high 'frictional costs' in the scheme (e.g. high levels of dispute, slow resolution of disputes, high rates of appeal, high rates of challenge to key legal questions).

1.8.2 Additional cost due to *Summerfield*

As shown in Table 1.1 above, our valuation results include an allowance of $431m as a central estimate in response to the *Summerfield* decision, which results in an increase in the recommended provision of

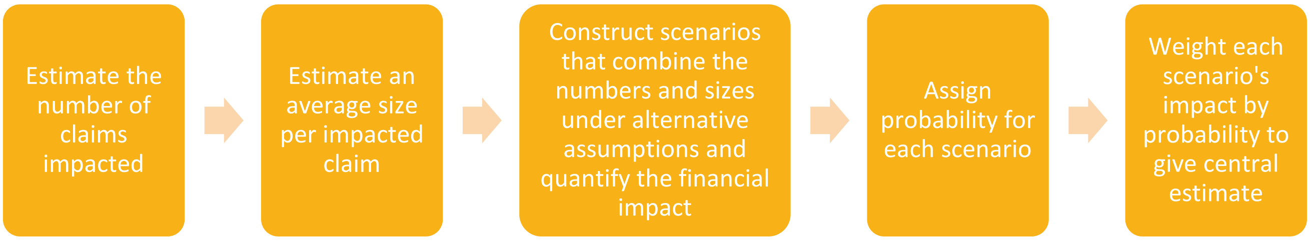
$584m. This section briefly summarises our approach to determining these amounts, and the resulting cost estimates and uncertainties. Full detail can be found in Section 11.

Approach

In accordance with the relevant Actuarial and Accounting standards, the central estimate is required to be the mean of the distribution of possible outcomes. To determine the central estimate related to *Summerfield*, it is therefore necessary to specify what the possible outcomes are, and to attach likelihoods to each of them – the costs under the different possible outcomes are then combined with the likelihoods of each outcome occurring to determine the central estimate.

Our first step in estimating the financial impact of *Summerfield* was to identify segments where the costs are, and are not, at risk due this decision. In order to identify these segments we have had extensive conversations with ReturnToWorkSA's internal legal and operational teams. After identifying the at risk segments, targeted file review activity and additional analytical work were used to estimate the number of impacted claims and potential size impacts per claim, from which scenarios were developed to help test a range of alternative scenarios, as summarised in Figure 1.1 below.

Figure 1.1 – *Summerfield* impact framework



The scenarios we have developed to assess the potential *Summerfield* impacts are:

1. **No impact scenario** – ReturnToWorkSA is fully successful on appeal and the previous interpretation is re-established.

2. **Lower impact scenario** – this assumes ReturnToWorkSA is partly successful on appeal or with subsequent mitigation strategies, which means fewer claims are impacted and/or the average size on impacted claims is lower than in the mid-range case.

3. **Mid-range impact scenario** – findings from the file review work are extrapolated across the broader cohorts (which we are comfortable to do, given we had control of the sampling process that guided the file review work), and allowances are made for the estimated impact of different types of combination issues, before an additional 'actuarial best guess' IBNR is included.

4. **More adverse impact scenario** – behavioural responses from claimants and their advisors lead to additional claims being impacted over time.

   (NB: we note that scenario 4 is not intended to represent a maximum possible impact scenario)

The scenarios and their likelihoods are combined to estimate the additional central estimate cost due to *Summerfield*.

Results

Figure 1.2 shows the resulting estimates of the number of claims impacted by *Summerfield* under each scenario. In these graphs the 'potentially impacted claims' number is the full estimate of the claims estimated as being potentially impacted before consideration was given to the type of 'WPI combination' that would be required for that claim – the mid-case scenario essentially removes 1 in 8 of the potentially impacted claims on account of them needing to first establish a chain of causation that is different from the facts in *Summerfield*.

Figure 1.2 – Estimated number of claims impacted by *Summerfield*

Serious Injuries **Lump Sums**

For additional Serious Injury claims we have allowed an average claim size of $1.3m, excluding lump sums (lump sum costs are included in the lump sum allowances). Based on an analysis of the claims identified as being impacted due to *Summerfield* through the file review work, the adopted average size assumes Income Support payments are 10% lower than a ‘normal’ Serious Injury claim and the Medical and other treatment costs are 30% lower.

For the impacted lump sum claims, the impact varies depending on the starting and ending circumstance of the claim – for example, in many cases where a claim moves up to being a Serious Injury as a result of their combined WPI score, they will actually receive a lower lump sum than they otherwise would have, given they no longer receive a Future Economic Loss benefit once they become a Serious Injury claim. Details of the lump size adjustments are in Section 11.4.2.

Table 1.2 below summarises the estimated financial impacts under each of the four *Summerfield* scenarios, along with the assumed likelihoods we have used in combining the scenarios to prepare the central estimate.

Table 1.2 – Results by scenario and overall estimated *Summerfield* impact

	No impact scenario	Lower impact scenario	Mid-range impact scenario	More adverse impact	Total
Additional Serious Injury claims	0	297	436	571	
Lump Sum claims impacted	0	808	1,182	1,622	
Central estimate - Serious Injury	$0	$398m	$672m	$882m	$438m
Central estimate - Short Term Claims	$0	-$36m	-$52m	-$65m	-$34m
Total Claims Cost	$0	$363m	$620m	$818m	$404m
Claims Handling Expenses	$0	$25m	$42m	$56m	$28m
Total Central Estimate	$0	$388m	$663m	$873m	$431m
Assumed likelihood of scenario	33%	17%	33%	17%	

In determining the likelihoods to apply to the different scenarios we considered a range of different input information, although ultimately these are judgmental decisions. In particular we benefited from legal input from both ReturnToWorkSA’s internal lawyers and their external legal providers, and separate QC opinions who were asked to review the *Summerfield* decision. We also understand that ReturnToWorkSA have been advised that they will be given an oral hearing in relation to their application for Special Leave to appeal to the High Court – that is, the first hurdle of 'review on the papers' has been overcome. And, not to forget, even if ReturnToWorkSA get special leave to appeal, there is still a need for its appeal case to be successful.

Table 1.3 summarises our adopted likelihoods and the rationale for them.

Table 1.3 – Rationale for adopted scenario likelihoods

Scenario	Adopted likelihood	Reasoning
Nil impact scenario	33% (1 in 3 chance)	We adopted a 1 in 3 probability for this outcome, on the rationale that: - a 50:50 likelihood seemed too high, given difficulties in getting a case heard in the High Court, and then winning it. - a likelihood that was any lower than (say) 25% did not seem to give sufficient weight to the legal views, and initial decision by the High Court to give an oral hearing in relation to the application for Special Leave to appeal.
Mid-range impact scenario	33% (1 in 3 chance)	By construction, this is our actuarial 'best estimate' of the outcome if the *Summerfield* decision is maintained. Given it (1) has been developed based on actual claim outcomes, and (2) is deliberately not biased toward optimistic or conservative assumptions, we believe it should have a higher weight than the 'lower' and 'more adverse' scenarios where a difference to past outcomes is also anticipated. As such, it got half of the remaining likelihood.
'Lower impact scenario' and 'More adverse impact scenario'	17% each (1 in 6 chance)	Both of these scenarios involve changes to past observed claim outcomes, and so we see that they are lower likelihood than the mid-range scenario. On balance, we believe it is reasonable that we give broadly equal weight to the competing forces of 'potential adverse behavioural change' by claimants and their advisers in an attempt to maximise financial benefits, and the potential for 'mitigating strategies' by ReturnToWorkSA as it seeks to effectively prevent undue deterioration in claim outcomes.

As more information emerges over time then the scenario likelihoods will change in response, and as this occurs then the central estimate will change accordingly; for example, if ReturnToWorkSA do not get special leave to appeal then the 'nil impact' scenario would automatically reduce to a 0% likelihood and the central estimate would increase.

Finally, we have used the scenarios above to inform the risk margin allowances in relation to *Summerfield*. In short, given ReturnToWorkSA's policy of adopting a 75% probability of sufficiency we believe that the post-*Summerfield* risk margin needs to cover the full cost of the mid-range scenario; noting also that the more adverse impact scenario has an assumed probability that puts it above the 75th percentile. This results in a much higher percentage loading than the normal risk margin, which we believe is appropriate given the unique circumstances presented by this case at the current time. In determining the risk margin we made an adjustment to allow for the amount of 'Serious Injury claim number risk' that was already included in the baseline risk margin (i.e. some of the Serious Injury claim number risk was already being recognised, and so it would be double counting if we were to add the full additional cost on top of the existing risk margin) – this is why the overall Summerfield provision ($584m) ends up lower than the mid-range impact scenario ($663m).

1.8.3 Movement in liability

Our central estimate is $461m higher than projected at the previous valuation. We have broken down the change in central estimate to two components:

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

This split also allows calculation of the 'actuarial release', where we add the difference between actual and expected payments to the movement in the liability due to claims experience, to give a measure of the 'profit' impact of claims performance relative to the previous valuation, as shown in Table 1.4 below.

Table 1.4 – June 2021 central estimate and determination of actuarial release/(strengthening)

	Central Estimate		
	Liability Estimate[1]	AvE Payments in 6 mths to Jun-21	Actuarial Release/ (Strengthening)[2]
	$m	$m	$m
Liability at Dec-20 Valuation	3,045		
Projected Liability at Jun-21 (from Dec-20 valuation)	3,108		
Claims Movement - Short Term Claims	42	-14	-29
Claims Movement - Serious Injury	78	2	-80
Impact of Change in economic assumptions	-91		
Impact of additional cost due to Summerfield	431		-431
Recommended Liability at Jun-21	3,569		
Total Actuarial Strengthening			-540

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

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

There is an actuarial strengthening (increase) of $540m for the period, an unfavourable result for the scheme. There are increases in both the 'baseline' valuation and due to the additional cost of *Summerfield.* Changes to economic assumptions decreased the central estimate by $91m. Each of these items is discussed briefly below.

1.8.4 Components of the actuarial release/(strengthening)

Table 1.5 shows the $540m actuarial strengthening by entitlement group, and split between Short Term Claims, Serious Injuries and the additional cost due to *Summerfield*.

Table 1.5 – Actuarial release/(strengthening) by entitlement group

Entitlement Group	Short Term Claims[3]	Serious Injury Claims[3]	Additional cost due to Summerfield	Total Actuarial Release [3]	Release (Strengthening) as %
				$m	
Income & Related	-1	-43	-178	-223	-30%
Lump Sums	1	-13	-26	-38	-9%
Legals	-9	-1	0	-10	-8%
Treatment Related [1]	-9	-25	-196	-230	-15%
Rehabilitation	0	1	-3	-2	-7%
Other Costs [2]	1	0	0	0	6%
Recoveries	5	-4	0	1	1%
Total Claim Costs	-13	-85	-404	-501	-18%
Expenses	-16	5	-28	-39	-14%
Net Central Estimate	-29	-80	-431	-540	-17%

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

[2] Investigation, common law, commutation, LOEC

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

The major factors contributing to the $540m actuarial strengthening at the current valuation are:

- The **impact of *Summerfield* allowance** resulted in an increase of $431m as discussed in Section 1.8.2 above.
- For **Short Term claims** there is an actuarial strengthening of $29m, which is the result of:
  - An increase of $16m for claims handling expenses. A key driver of this is the costs still being incurred for the management of claims that are now well beyond the two year Income Support boundary (and particularly so for transitional claims).
  - An increase of $15m in relation to the growth in Hearing Loss claims. This is spread across a number of entitlement groups: Lump Sums ($6m of extra cost), Medical (around $8m of extra cost, mostly for hearing aids, but also for additional medico-legal assessment) and additional Legal costs.
  - Transitional claims continuing to cost more than expected, due to the slow runoff and continuation of new disputes and new WPI assessments. This added $7m to the liability across Lump Sums, Legal costs and medico-legal assessment costs.
  - Income Support costs increased by $1m overall, due to a combination of:
    - Improved RTW rates leading to a saving of $10m
    - Higher numbers of claims commencing Income Support partly offsetting this with a $6m increase
    - Increased allowances for the cost of long term dependent benefits increasing the liability by $5m.
  - A release of $5m for recoveries (i.e. an increase in the recoveries asset), reflecting the continued levels of higher recoveries being received.
  - A release of $5m for the non-hearing loss components of Lump Sum entitlements. This is due to a lower assumed number of claims entitled to an Economic Loss lump sum.
- For **Serious Injury claims** there was an actuarial strengthening of $80m due to:
  - Higher claim numbers (including IBNR assumptions) resulted in a strengthening of $81m. This strengthening is in response to the continued late emergence of Other Serious Injury claims for 2017 and prior accident periods and already very high claims for the 2018 year.

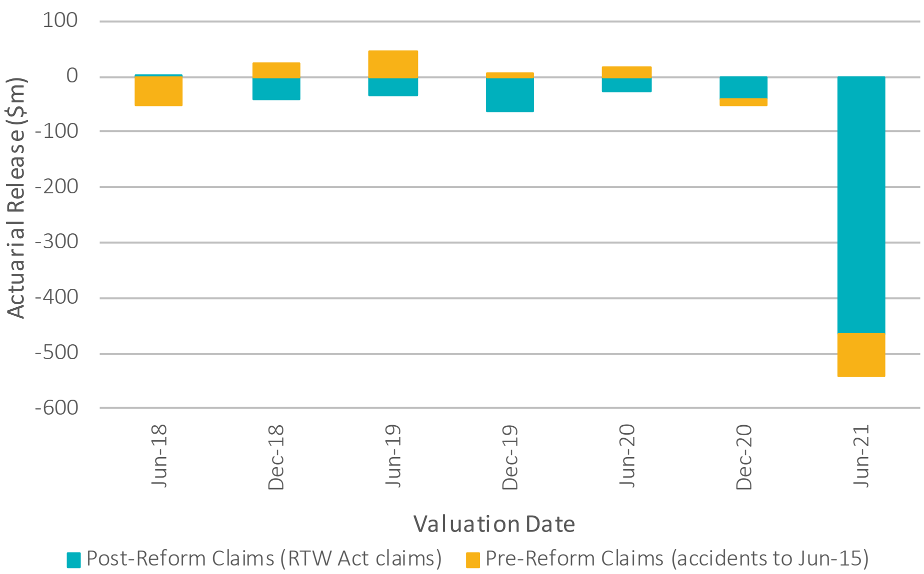
We caution that, even after including this strengthening, there is still only a very small allowance for remaining ongoing claims to ultimately reach the Serious Injury boundary. Compounding this risk, there continues to be a much larger than expected number of long duration claims still commencing WPI assessments, lodging new disputes and remaining active in the system. Further, we continue to interpret the higher numbers of Serious Injury claims being identified at early durations for recent accident years as a speed-up in the identification pattern, meaning we have not allowed for the late identifications that have been occurring on older accident years to continue for more recent accident cohorts. If either of these assumptions do not hold, there will be material implications for both the outstanding claims liability and average premium rate.

> A reassessment of the claims handling expenses loading resulted in a release of $5m. As the size of the Serious Injury cohort has grown, additional scale benefits are being achieved and this has led to a lowering of the CHE rate from 8.0% to 7.5%.

> Other basis changes were minor overall, and resulted in a strengthening of $2m. This, and actual payments being $2m higher than expected, explain the remaining difference.

Figure 1.3 shows the actuarial release/(strengthening) at each valuation over the last few years. The current results are the sixth in a row where there has been cost growth on RTW Act claims – and to be clear, even without the *Summerfield* allowance this still would have been the case.

Figure 1.3 – History of actuarial releases/(strengthenings)



1.8.5 Impacts of economic assumption changes

Changes to inflation and discount rate assumptions decreased the net central estimate by $91m.

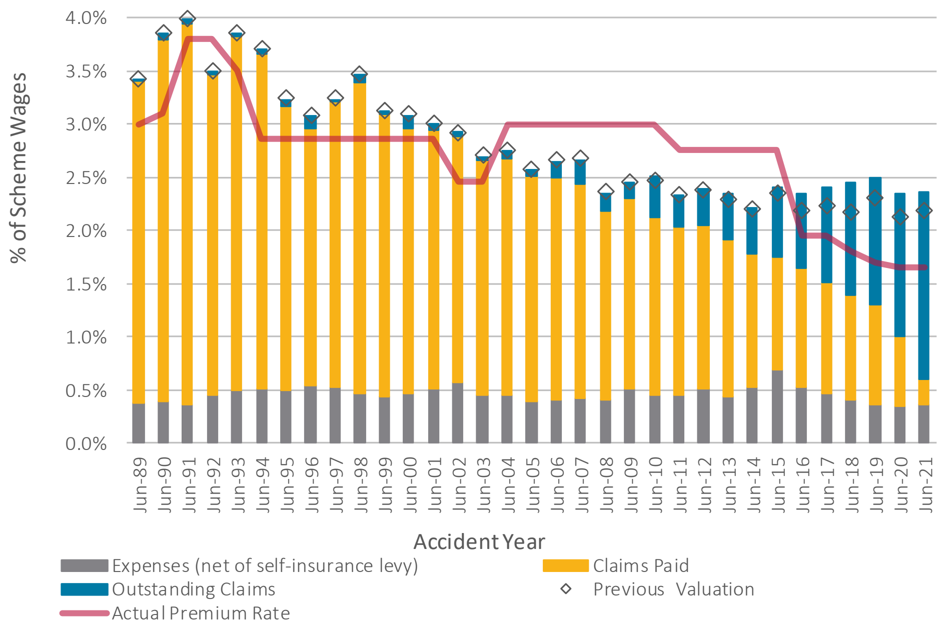
Overall, the gap between discount and inflation rates has broadened and is improved compared to what was adopted at the December 2020 valuation. The main contributor to the decrease in liability is an increase in the yield curve at mid to longer term durations.

1.9 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 1.4 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 1.4 – Break even Premium rate* and actual premium rate charged



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

The main points to note are:

- The introduction of the RTW Act reduced the BEP for accident years between 2008 and 2010 to just under 2.5% of wages.
- For accident years between 2011 and 2015 the costs were progressively lower again, as claims had less opportunity to remain on long term benefits.
- The impact of *Summerfield* pushes the 2016 and later BEP estimates to be in line with pre-RTW Act periods, eroding much of the savings introduced with the reforms.

  Importantly, the *Summerfield* impact that is included here is based on the valuation central estimate, which includes an allowance for the potential of a 'nil cost' outcome – so, if ReturnToWorkSA is unsuccessful in its the High Court appeal then the BEP costs will most likely be even higher than is currently shown.
- The 2019 year is developing as a high cost year, due to a combination of high Income Support claim numbers, poor early RTW outcomes and a higher than normal Serious Injury cost (due to a number of very expensive Severe Traumatic Injury claims). The BEP estimates for 2020 and 2021 are lower than the 2019 BEP, due to fewer Severe Traumatic Injury claims.
- The current estimate of the BEP for the 2021 accident year is 2.35% of wages, up from 2.19% at the December 2020 valuation. Most of this increase is due to the additional cost of *Summerfield*. In terms of the components:
  - The allowance for *Summerfield* increases the BEP by an additional 0.21% of wages.

> Pre-*Summerfield*, Short Term claim costs are projected to be 0.01% of wages lower than at the previous valuation.

> Pre-*Summerfield*, Serious Injury costs are unchanged, with the impact of higher claim numbers being offset by the impact of higher discount rates.

> Scheme expenses reduced by 0.03% of wages.

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

We emphasise that (as seen in the graph) the BEP estimates for recent accident years include a significant outstanding claims estimate and are therefore likely to change as experience emerges. Compounding the uncertainty is the impact of *Summerfield* which is subject to a high degree of estimation and uncertainty about the ultimate legal outcomes that will eventuate. We also note that the adopted wages figure for 2021 still involves a degree of estimation.

1.10 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 14 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:

- **The outcome of *Summerfield*** and the **claim impacts if *Summerfield* is not successfully appealed** – ReturnToWorkSA is seeking to appeal the *Summerfield* decision in the High Court, and an outcome of this may not be known for 6-12 months. As explained above, the impacts of not being successful with the appeal (or else having the decision's impacts overturned via legislative change) are financially very significant.

  Further to the above, there is also considerable uncertainty about what the ultimate claim outcomes would be if ReturnToWorkSA are not successful with the appeal. In particular, the ability of claimants and their advisors to achieve higher WPI scores than in the past will be the key determinant of the ultimate financial outcomes. Given the high level of legal involvement in the scheme, the risk of 'adverse behavioural change' is high.

- **Legal precedent risk** – risks here relate to the possibility of decisions which are unfavourable to the scheme or the culture and behaviour of its participants. In particular, there are still many claims in dispute seeking to access higher levels of benefits than ReturnToWorkSA has determined. Despite a number of apparently 'key cases' having resolved over recent years, there has not been any noticeable reduction in the number of such disputes, and indeed new avenues of challenge to the operation of WPI continue to emerge.

  Until a clear and decisive legal position is established as to how the scheme should operate in practice, this risk will remain.

- **WPI assessments** – under the RTW Act, there are significant differences between the compensation available to claims above the 30% WPI threshold and those below. This factor, combined with the lump sum for future economic loss payable to Short Term claims, means there is pressure on WPI assessments. The scheme will face significant financial consequences if this leads to any form of 'WPI creep'. The robustness of the 'once and for all' WPI assessment rules under the RTW Act is an important area of risk.

  Further, we emphasise that no allowance has been made for the growth in Income Support claims reaching the two year legislative boundary to impact on WPI assessments – that is, we have not anticipated any slippage in WPI scores, nor any increase in the numbers of Serious Injury claims, as a result of the increase in claim durations seen between 2018 and early 2020.

- Serious Injury claim costs – these claims are entitled to benefits for life, and the risks for this group relate to factors that are common across most claims, and deviations from our assumptions could therefore compound across multiple years. For the current valuation the key uncertainties are:
  - Ultimate numbers of claims – there are several areas of uncertainty in relation to Serious Injury claim numbers. These include the impact of late emerging claimants (whether due to delayed WPI assessments, late surgeries, etc) as well as the number of outstanding Serious Injury application disputes and other WPI disputes that could see claims ultimately meet the 30% WPI threshold.
  - Life expectancy – the future life expectancy of Serious Injury claimants has a significant impact on future cost projections. There is some evidence emerging that life expectancy for this group could be shorter than is allowed (which would reduce costs), and we will continue to monitor this.
  - 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 move into residential care facilities; on the flip side of this, we have in the past seen that less severely injured claims will often cease their connection to the scheme once they reach retirement age, and if this occurred it could lead to lower costs. Another example is the potential increase in costs for care related specialists due to competition with the NDIS.
- Claim durations for Short Term Claims – between 2018 and early 2020 there was deterioration in claim durations – both more claims reaching the two week threshold to be counted as an Income Support claim, and longer durations on benefit thereafter due to slippage in RTW outcomes (relative to the much improved RTW rates seen over the preceding few years). Over the last 12 months these trends have reversed and improvement is again being seen (and this was despite the disruption caused by COVID-19). It is not yet clear at what level RTW rates will be sustained over time.
- Outcomes for claims with current disputes – risks here include the possibility of decisions which are unfavourable to the scheme, as well as the behavioural consequences of so many disputes remaining. Open dispute numbers remain high and more claims are moving into the later stages of the dispute resolution process.
- Hearing loss claim numbers – there has been unprecedented growth in hearing loss claim numbers in the last two years, and the valuation basis has been lagging this growth. If the upward pressure continues then further increases are likely.
- Economic environment – there is considerable uncertainty in financial markets, and this has impacted the discount rates used to determine the valuation results, which are low by historical standards. While employment related impacts have been less significant than originally feared they might be, there is still a higher than normal risk that the economic environment could change in adverse ways.
- COVID-19 impacts – while the impacts on claim outcomes to date have been modest, there is still uncertainty about how COVID-19 will impact over time. If the health and/or economic situation changes for any reason, for example if there is an unexpected spike in infections, this could potentially lead to material disruption to claim outcomes.

Even though the RTW Act provisions commenced over six years ago, there are still key areas of the Act being tested in the courts, and it is still not clear how many Serious Injury claims will ultimately emerge.

The current valuation basis reflects our best estimate of how this experience will eventuate. Over time, our basis will further reflect the developing post-reform experience, and it is possible that the experience will differ materially from our current expectations.

To place these uncertainties and risk in context, Figure 1.5 shows some of the key risks and uncertainties in the central estimate (orange), as summarised in Section 14 of the report, relative to the risk margin adopted in the liability reserves (blue). The risk areas below are largely independent of each other, so it is possible that a number of these risks could crystallise at the same time.

Figure 1.5 – Comparison of reserving risk margin to key risks and uncertainties

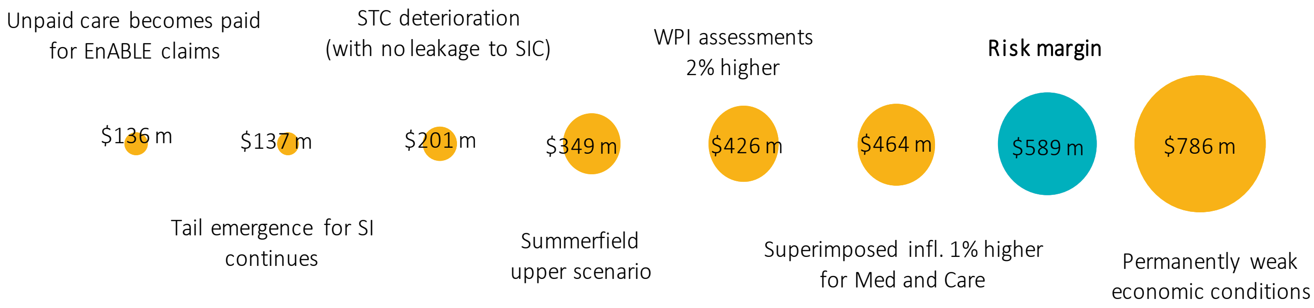


Figure 1.5 indicates that there is a range of plausible scenarios that could see the liability move by several hundreds of millions of dollars. While the most significant scenario relates to long term economic conditions (which will most likely continue to be the case now for the fund given its very long mean term of liabilities), most of the other scenarios relate primarily to Serious Injury claim numbers and/or costs.

We observe that while most of the larger uncertainties would emerge over the long term, a significant increase in the liability reserves could occur more quickly – in particular, adverse legal precedent which increased the number of claims who meet the criteria for Serious Injury benefits would have immediate consequences for the liability, as demonstrated by the *Summerfield* case.

1.11 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 15 thereof.

This report has been prepared for the sole use of ReturnToWorkSA's board and management for the purpose stated in Section 2. 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.

2 Introduction and scope

2.1 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 2021.

Our previous actuarial review was as at 31 December 2020, and was documented in a report dated 3 March 2021.

2.2 Scope of the review

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

The primary purpose of the June 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 uses this estimate in determining the provision for outstanding claims in its annual financial accounts.

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.

2.3 Compliance with standards

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

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

2.4 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.

2.5 Structure of this Report

Section 3	Describes the approach we have taken to the valuation, and provides a brief overview of the information provided to us.
Section 4	Summarises the current operational landscape impacting on the scheme.
Section 5	Summarises high level recent claims experience.
Sections 6 to 10	Detail our analysis of scheme experience and valuation assumptions for different segments of the portfolio; all these sections are prior to the inclusion of costs related to the recent *Summerfield* decision, which is summarised in Section 11.
Section 11	Describes the additional costs that have been included due to *Summerfield.*
Section 12	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 13	Shows detailed tabulations of the outstanding claims valuation results.
Section 14	Provides sensitivity analysis of the valuation to key assumptions and highlights some of the key uncertainties in our projections.
Section 15	Sets out important reliances and limitations.
Section 16	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.

3 Approach and information

3.1 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 commencing on or before 1 July 2015. 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.

For this valuation a new section has been added to our report to summarise the cost estimates related to an important recent legal decision, "*Summerfield*". In order to understand the underlying scheme experience and separately identify the impacts of the *Summerfield* decision, our valuation work has been split into two stages:

1. Baseline valuation – what our liability would have been if not for the *Summerfield* decision.
2. Summerfield valuation – the overall liability estimate we have recommended after including an allowance for the *Summerfield* decision.

The *Summerfield* decision and its implications are briefly described in Section 4.2, before the details of our *Summerfield* valuation allowance are summarised in Section 11. Table 3.1 summarises where the entitlement and claim cohorts are documented in this report.

Table 3.1 - Report Structure by Claim Cohort

	Short Term Claims	Serious Injury Claims	Additional cost due to Summerfield	Other Assumptions	Overall Results
Valuation Basis and Results	Sections 6 to 9	Section 10	Section 11	Section 12	Section 13
Economic Impacts	Section 12 (basis) and Section 13 (results)				

Our approach to undertaking the 'Baseline valuation' and 'Summerfield valuation' are summarised below.

3.1.1 Baseline valuation and underlying Scheme experience

For this part of our work, all claims have been valued on a pre-*Summerfield* legal basis – this is the starting point in determining the outstanding claims liability. That is, Short Term Claims and 'pre-*Summerfield*' Serious Injuries have been valued in a manner that is consistent with previous work, including preparation of a 'pre-*Summerfield*' risk margin.

This allows us to understand and quantify the underlying scheme experience, before the impacts of the *Summerfield* decision are added.

3.1.2 Summerfield valuation

There is significant uncertainty about the scale and likelihood of the impacts from *Summerfield*, not least of all because ReturnToWorkSA is seeking to appeal it in the High Court. Indeed it is still possible that there will be no impact, if ReturnToWorkSA is (fully) successful in its High Court appeal (or if the decision is dealt with via legislative change). On the other hand, if the appeal is not successful then the *Summerfield* decision likely has very material implications for the scheme's future financial outcomes.

Given there will be no decision in relation to the High Court appeal for at least a number of months, there is necessarily a high level of uncertainty in relation to this component of the work. This unusual set of circumstances impacts on both the central estimate of the claims liability and the recommended provision, as is explained in more detail throughout this report.

3.1.3 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.

In a technical sense, the central estimate is 'intended to be an unbiased estimate of the mean (statistical expectation) of the outstanding claims liability', having considered the relevant experience of the entity and taking into account any special features in the claims experience. As noted above, the *Summerfield* decision is a quite unique 'special feature' and so a different approach to standard actuarial projections has been required for this work – this is explained more fully in Section 11.

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. Again, given the unusual nature of *Summerfield*, our normal approach has required modification to come up with the overall post-*Summerfield* risk margin that we have recommended ReturnToWorkSA should hold.

To be clear, the adopted risk margin loading has <u>not</u> been set at a level that would guarantee coverage of all potential additional costs if the *Summerfield* decision – or other key cases like it – is maintained on appeal. It is also worth observing that despite a number of apparently 'key cases' in relation to the operation of the RTW Act having resolved over recent years, new avenues of challenge to the way the provisions of the Act are applied have continued to emerge, in particular in relation to the operation of WPI assessments.

3.2 Information

3.2.1 Standard data extracts

Claims data was provided in the form of a transaction file with complete scheme history to 30 June 2021. 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 0 shows summaries of the claims data, including data reconciliations.

3.2.2 Qualitative and additional information

In addition to the standard data extracts, we obtained additional information from ReturnToWorkSA and its claims agents EML and Gallagher Bassett. This included briefing sessions on 21 June 2021 and operational information that was provided separately.

The additional information we received included:

- Tableau-based monthly monitoring reports showing:
    - Claim reports
    - Payments by benefit type

- Open, closed and lodged disputes by month
- Income Support continuance rates and numbers

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

3.2.3 Additional information relating to the *Summerfield* decision

To support our work in relation to the *Summerfield* decision we have required a range of additional information to normal:

- Discussions with lawyers and relevant subject matter experts on the ways *Summerfield* can impact on claim outcomes and costs.
- Information from ReturnToWorkSA's legal advisors in relation to the High Court legal process and their views on the likelihood of success (both on the initial special leave application, and then on the actual case if it is heard).
- Subject matter experts have undertaken file review work on identified 'high risk claims' to assess whether different outcomes would be likely to occur if the *Summerfield* precedent was applied to their circumstances.
- Lump sum data showing the individual WPI scores from key accident periods for all claims with a recorded WPI score

4 Scheme environment

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

4.1 Legislation

There have been no changes to the scheme's legislation or Regulations since the December 2020 valuation.

4.1.1 Changes to impairment assessment guidelines

ReturnToWorkSA is currently undertaking consultation in relation to proposed changes to the Impairment Assessment Guidelines ("IAGs"). At this stage, no final decisions have yet been made in relation to the form of any changes.

Importantly, any changes to the IAGs will only impact *new injuries* from once the changes are made (i.e. only claims with accident dates after any changes are implemented will be impacted; existing claims will still have their assessments undertaken with the existing IAGs).

As such, there is no direct relevance of the potential changes to IAGs for the current outstanding claims liability assessment, and no changes have been anticipated in our projections.

4.2 Legal precedent under the RTW Act

The RTW Act continues to be tested through the scheme's dispute resolution processes. As has been the case for a number of years, there remains a large number of open disputes, including a higher than usual number of cases on appeal to the Full Bench of SAET and to the Supreme Court; ReturnToWorkSA is also currently seeking special leave to appeal the *Summerfield* decision to the High Court. Until there is a settled legal basis that provides clarity around how the scheme's key boundaries should operate in practice there will be uncertainty as to the financial costs which eventuate under the RTW Act benefit package.

The types of cases that are key to the long term operation of the Return To Work scheme that are still to be resolved include:

- 'Combining' of injuries for WPI assessment and lump sum purposes – many claims remain in various stages of the dispute resolution process that relate to the WPI assessment rules. Despite a number of apparently 'key cases' having resolved over recent years, there has not been any noticeable reduction in the number of such disputes, and indeed new avenues of challenge to the operation of WPI continue to emerge.
- Whether employment is the significant cause of secondary injuries or injuries away from the workplace – these types of cases have the potential to extend the benefit eligibility period beyond the 104 week cap by 're-starting the clock' on account of a new injury being recognised.
- Issues related to the functioning of the dispute resolution system, for example: the reviewability of decisions, the validity of past agreements and consent orders, and rules relating to legal costs.

Given the lack of clarity that still remains about how the RTW Act boundaries apply in practice – in no small part due to the continued emergence of new legal challenge to the legislative rules, and then slow rate of dispute resolution thereafter – it seems likely that it will be a number of years more before there is confidence about how the various RTW Act legislative provisions apply in practice (despite the fact the RTW Act has now been operational for six years).

4.2.1 Return To Work Corporation of South Australia v Summerfield

On 11 March 2021 a decision was handed down by the Full Court of South Australia in the case of *Return To Work Corporation of South Australia v Summerfield*[2] *("Summerfield").* This decision substantially differs from ReturnToWorkSA's previously adopted position in relation to how key aspects of WPI assessments should be undertaken.

ReturnToWorkSA have applied for special leave to appeal the *Summerfield* decision to the High Court of Australia, which is the last avenue of appeal. We understand that an oral hearing in relation to the special leave application will occur, although it will not take place before October 2021.

Whilst there has been ongoing challenge to the WPI assessment rules since the RTW Act commenced, and a number of SAET decisions had been counter to ReturnToWorkSA's interpretation, prior to *Summerfield* all key cases that reached the Full Court had findings that were principally consistent with ReturnToWorkSA's legal interpretation. As such, up to the current valuation assessment all valuation work and financial statements for ReturnToWorkSA have been undertaken on the assumption that ReturnToWorkSA's legal interpretation of the RTW Act in relation to the Serious Injury test and the Whole Person Impairment (WPI) assessment rules would be maintained through legal review – this is a key component of what is referred to as the Baseline Valuation in Section 3.1.

The specifics of *Summerfield* can be summarised as:

1. Mr Summerfield fractured his left femur and injured his left hip as a result of a fall at work in 2016. He underwent a total hip replacement, and subsequently underwent further revision surgery in which a replacement hip was inserted.
2. Mr Summerfield suffered further impairments in 2017, including lumbar complaints and pain, that were found to be caused by the left hip injuries and resulting problems (such as an altered gait and limp, and shortening of his left leg resulting from the hip replacement).
3. After Mr Summerfield made a claim for lump sum compensation pursuant to s 58 of the RTW Act, ReturnToWorkSA separately determined the two injuries which resulted in:
    a. a 31% WPI for the left femur, left hip and surgical scarring for the original injury in 2016
    b. and a WPI of 8% for the lumbar spine injury in 2017.
4. Mr Summerfield disputed the separation of the two injuries, and instead said they should be 'combined' under s 22(8)(c) of the RTW Act because the impairments arose from the "same injury or cause."
5. The Full Court agreed with Mr Summerfield, with the result that he now has a single, but higher, WPI score.

The key consequences from *Summerfield* as they relate to the actuarial valuation work are that:

- Assessed WPI scores will in some cases be higher, as a result of injuries being 'combined' to determine the WPI score.
- As a result of the higher WPI scores:
    - More claims will be assessed as Serious Injuries (SI). Claims assessed as SI will gain access to the legislated lifetime benefit package, and this will therefore lead to higher claim costs than would otherwise have been incurred.
    - Some claims may also gain access to additional permanent impairment lump sums.

The potentially very significant financial consequences of this decision, when combined with the unknowable outcome of the appeal and limited historical claims information that is available to directly

[2] *Return To Work Corporation of South Australia v Summerfield*, [2021] SASCFC 17, 11 March 2021

assess the financial impacts, make this a somewhat unusual impact that needs to be considered in the valuation work – our approach to quantifying the potential financial impacts and determining the recommended central estimate and provision are explained in Section 11.

4.3 COVID-19 impacts

The COVID-19 pandemic and related health and economic response has been an evolving issue in Australia and throughout the world over the last year. The unique set of circumstances associated with the COVID-19 pandemic means there is greater than normal uncertainty in relation to the broader financial and economic landscape, although thankfully the impacts in South Australia to date have been far less severe than in other places.

Key uncertainties at this time include the length of the pandemic and effectiveness of vaccination programs in containing and preventing infection, the potential for 'later waves' of outbreak, the related impacts of any slow-down in the broader economy, and the effectiveness of government initiatives to mitigate these impacts.

Depending on how these issues play out in South Australia, ReturnToWorkSA's liabilities may be impacted. While the impacts to date have been small, it is possible that this could change given how the situation has evolved over the last year; for example, outbreaks in other parts of Australia have highlighted how quickly circumstances can change and therefore demonstrate that the level of uncertainty is heightened at the current time.

Current assessment of impacts from COVID-19

Table 4.1 summarises a number of areas where COVID-19 has or may impact on the scheme's operations, and our assessment of the current impact of each.

Table 4.1 – Potential COVID-19 impacts

Impact	What we know
Actual COVID-19 claims	Very few actual COVID-19 claims have been reported. The SA infection rate is very low, so IBNR cases should be trivial or nil in relation to the valuation; any future outbreak could impact future premiums.
Disruption to patterns of work	There have been industries with major changes to work patterns, including a shift to working from home at times. It largely appears that South Australia has been on a trajectory back towards normal work operations across most employment indicators, albeit with some disruptions such as the recent July 2021 lockdown restrictions.
Changes in RTW opportunities	At our June 2020 review we were made aware of claimants impacted by the unavailability of suitable duties at their pre-injury employer. Subsequently these impacts have reduced, and we are only aware of minor ongoing impact in relation to availability of suitable duties.
Claims processing disruptions	Mobile claim management was temporarily suspended during the initial lockdown period, and again in November 2020 and July 2021, with the claims management workforce utilising working from home arrangements. Dispute resolution has been slowed down in some cases due to restrictions on cases being heard in person.
Delays to treatment	We are not aware of any material levels of treatment delay at this time.

Economic factors	There has been major disruption to investment markets and the economic outlook. The inflation expectations and risk free yields incorporate this outlook as explained in Section 12.

Allowances for COVID-19 impacts in the valuation

Our valuation basis assumes that COVID-19 infections continue to remain low in South Australia and that there are no additional shutdowns of substance, further economic disruption or major impacts on business confidence.

The experience over 2020 and 2021 has been used to guide the setting of the valuation assumptions as to the claims experience in a COVID-19 impacted world; in doing this, when interpreting the recent claims experience we have been conscious to identify areas where the experience is not, or might not, be the best indicator of ongoing performance (for example where there was a large dip in claim numbers at the initial shutdown, and when hospital costs dropped as surgeries were restricted). Under this approach the valuation assumptions implicitly incorporate the impacts of 'COVID-19' to some extent.

While we have made assessments that we consider to be reasonable, it is impossible to estimate the impact of COVID-19 on ReturnToWorkSA's liabilities with any level of certainty at the current time. While the unique set of circumstances means there is more than the general level of uncertainty around the valuation outcomes, the observation that actual claims performance in 2020 and 2021 was overall better than in recent years helps give some confidence that under current infection rates any impacts should be at the low end of the range of potential impacts.

4.4 Other operational and environmental changes

This section describes recent trends in the scheme environment. Section 16 provides an overview of earlier operational and legislative changes which are useful in understanding the scheme's historical experience.

4.4.1 Evolution of the claims management model

Earlier identification of potential serious injury claims

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

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

The impact of this change on observed Serious Injury claim numbers is discussed further in Section 5.1.

Improved management of long term claims

Further to the above point, the improved knowledge relating to serious injury claimants is also leading to proactive decision making that leads to better social and financial outcomes. Two examples of this are:

- In the EnABLE cohort, where it was identified that some providers operate at materially higher cost than others, changes to purchasing arrangements have led to provider changes that are forecast to save many millions of dollars.
- Serious Injury RTW Project – a review of work prospects and opportunities for those with serious injuries has commenced, with an initial focus on those with already certified work capacity.

Whilst it is still early in the project, there are already examples of claimants returning to work who would otherwise have remained on Income Support benefits. At this stage we have not anticipated further successful outcomes beyond those already known, but it is possible that this program could lead to material financial savings in the serious injury claims liability, particularly so if the *Summerfield* decision is maintained and the Serious Injury cohort becomes much larger in size.

Resolution of transition claims

For the last two years ReturnToWorkSA and their claims agents have been proactively working with claimants to try and resolve as many 'old Act' claims as possible. For the most part these claimants ceased receiving Income Support and medical treatment a number of years ago as per the scheme's legislative provisions (the exceptions are for claims such as dependent benefits and late surgeries), and so remaining costs are largely to do with lump sums, medico-legal assessment, and the resolution of disputes.

While the need to await key legal precedent somewhat explains the slow progress in resolving this cohort, more so it is the continued emergence of new referrals into this cohort that have meant the timeline has been extended over time – Section 4.4.2 below provides additional context to these observations.

Response to hearing loss claims spike

As explained in Section 4.4.5 below, noise induced hearing loss claim numbers have rapidly increased over the last three years. Most of this increase has come from a small number of providers (including both legal providers and medical providers).

To help manage this spike in new claims, ReturnToWorkSA is increasing the number of specialist staff in its claims agents, with a focus on ensuring there are sufficient resources with the technical skill set required to assess these claims. In addition to the extra staffing resources, new claim forms have been developed to ensure that the proper employment history has been gathered and is available when assessing the claim.

"Back to basics"

Following a period of deterioration in 2018 and 2019, a number of strategies commenced in 2020 and 2021 that are intended to lead to improved claim outcomes; a key enabler of this has been an increase in the number of claims managers, to help return key case load and 'mobile claim manager' metrics back to the level they were operating at prior to 2018. This is intended to lead to:

- Improved RTW outcomes, via reduced caseloads and refinement in the model to have more experienced resources undertaking key roles. Mobile claims managers are also increasingly being aligned to key industry sectors to ensure they have the best possible knowledge of potential RTW options in those sectors.
- Faster and tighter claim acceptance practices, including additional support in calculating pre-injury earnings and overtime amounts. Learnings from the hearing loss claims project noted above have demonstrated the opportunities for improvements in the claims acceptance process.
- More focus on the appropriate goal for each claimant, whether that be at the pre-injury employer or with a new employer.
- More targeted referrals to vocational rehabilitation providers.

In each case above we can already see changes in relevant 'lead indicator' trends that suggest the actions are impacting on claim outcomes. As discussed in Section 6, the aggregate impact of these changes is resulting in improved income support RTW rates, which is also leading to financial savings for the scheme.

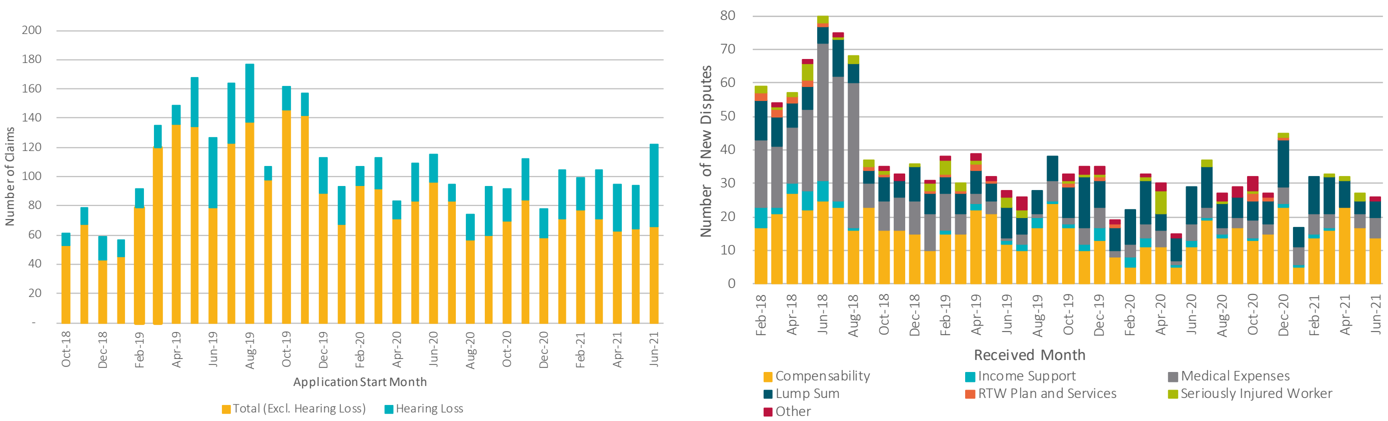
4.4.2 Continued activity on transitional claims

As mentioned above, ReturnToWorkSA has been seeking to resolve as many ‘old Act’ transitional claims as possible over the last two years, although progress has been slow.

As demonstrated by Figure 4.1 below, the key reason for this is that claims have continued to emerge into various claim processes at similar levels to the past. As a result, there are still around 1,000 non-serious injury claims open from pre-June 2015 claims, even though many of the claims originally open when the project commenced two years ago have now resolved.

Figure 4.1 – Activity from transitional claims (i.e. pre-June 2015 injuries only)

New Applications for WPI Assessments **New Disputes Commencing**



As this shows, for claims with injury dates prior to June 2015 (that is, more than six years in the past):

- The number of transitional claimants still commencing WPI applications continues to be high, and there has been no significant reduction in numbers in the last 18 months. Completing the assessments, finalising disputes that follow the assessments, and then completing outstanding lump sum payments on eligible claims is therefore likely to take a number of years.
- The number of new disputes continues to average around 30 per month, with only a very slow ‘runoff’ pattern (that is, there is only a very slow downward trend toward zero).

In each case these processes are taking much longer to complete and ‘runoff’ than we anticipated. Further, and despite each of these processes having moved well past the level we expected it to, it is far from clear when there will be finality to new claims, disputes, WPI assessments, etc, emerging from these older periods. Compounding this, the continued new activity also appears to be leading to additional claims gaining access to the Serious Injury benefit package over time, as discussed in Section 5.1, and the existence of such a large cohort of older claims has exacerbated the financial consequences of the *Summerfield* decision.

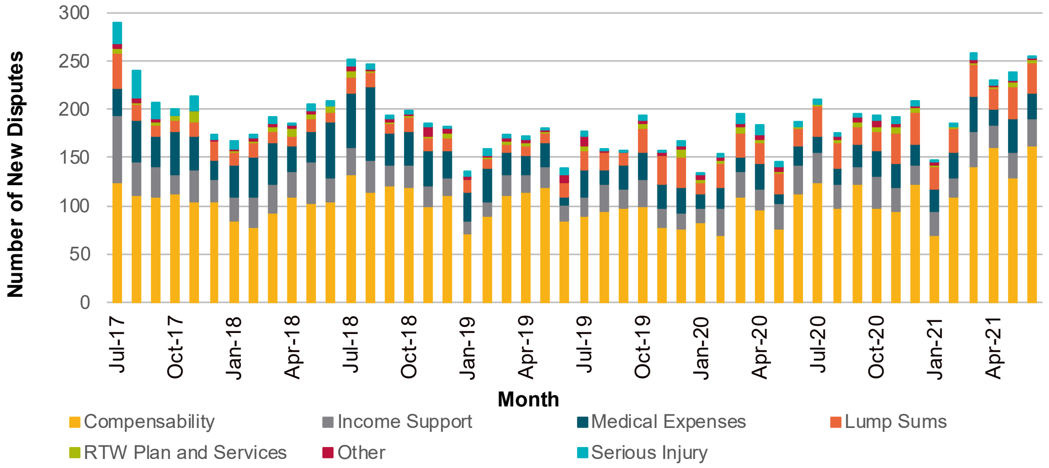
The continuation of activity on these older claims has led to further increases in our cost projections, particularly for legal costs, lump sums, medico-legal costs and serious injury benefits. On current trends, it will be at least another two years until the transition cohort is genuinely down to a small runoff level; if the activity levels on these older claims continue for longer than our basis anticipates, then further valuation increases will result.

The lump sum valuation basis is discussed further in Section 7, legal costs in Section 9 and Serious Injury claim numbers are discussed in Section 5.2.

4.4.3 Dispute numbers and dispute resolution

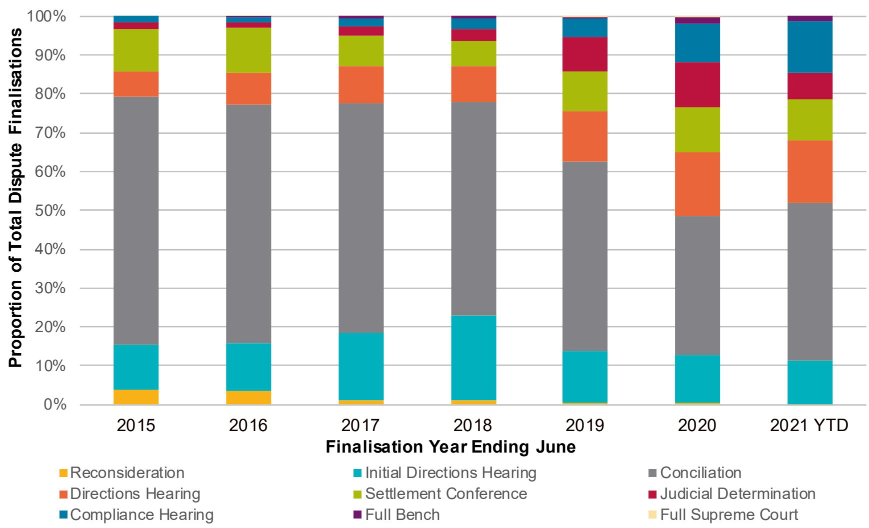
Since the RTW Act commenced in 2015, dispute numbers have tended to be between 150 and 200 new disputes per month, although there have been a number of 'spikes' as key boundaries commenced: medical expense disputes spiked after June 2016, due to a significant number of disputes around future surgery applications, and Serious Injury disputes increased around June 2017, as shown in Figure 4.2.

Figure 4.2 – New Disputes by Dispute Type (monthly)



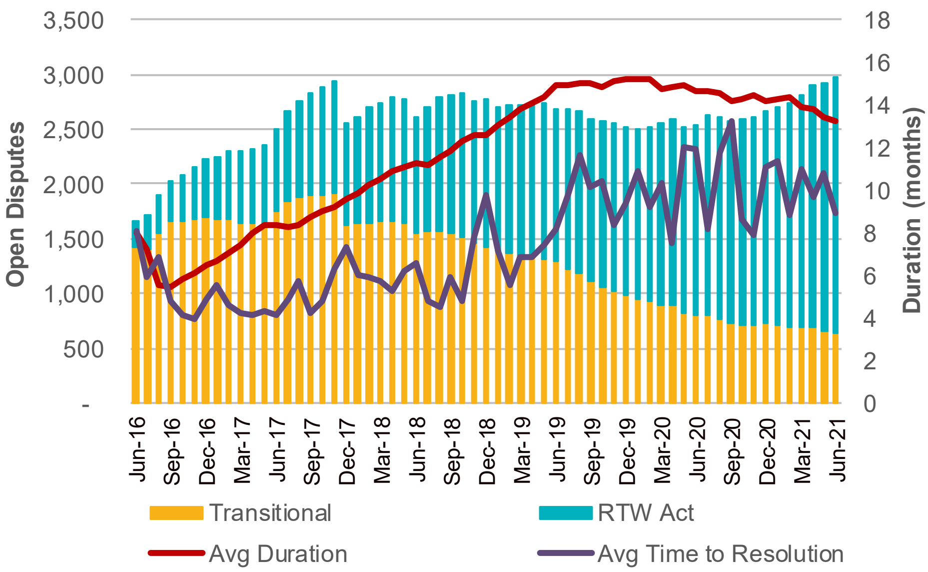
Over the last six months dispute numbers have stepped higher, averaging nearly 250 disputes per month since March 2021. Compounding this, there has been a clear shift in dispute finalisation patterns, with far fewer disputes resolving at or before conciliation, as shown in Figure 4.3 below. In the graph, the stages of dispute are ordered, with the bottom of the bars showing the early and therefore 'cheaper' stages of resolution, and the upper ends showing the later and more costly stages.

Figure 4.3 – Stage of Resolution for Disputes



The significant growth in the number of disputes moving beyond conciliation has led to a considerable lengthening of dispute timeframes over the last few years. The result is that the number of open disputes remains high, at nearly 3,000 disputes. Figure 4.4 shows the number of open disputes over time, split between RTW Act claims and transitional claims, and the average duration of open and finalised disputes.

Figure 4.4 – Open Dispute and Duration



Our observations are:

- The level of open disputes has again been increasing, and is now at nearly 3,000 open disputes, with growing RTW Act claims on top of an only slowly reducing number of open transitional claim disputes. This indicates the new scheme is not yet at a 'steady state' for disputes. There is still uncertainty as to the ongoing level of disputes under the RTW Act and the impact of these disputes on claim outcomes.
- There are still over 540 disputes open for transitional claims (excluding hearing loss disputes, which tend to be from more recent report periods).
  - Six years after the RTW Act commenced we are still consistently seeing new disputes commencing from transitional claims (as shown in Figure 4.1), and this group continues to represent a material risk to our liability estimate.
  - The open dispute count on transitional claims reduced by only 101 disputes in the last six months, and at this rate it will still be at least 3 to 4 years before there are negligible transitional disputes left.
- The duration for open disputes has more than doubled since July 2016, from around seven months to 14 months. Even though the growth in duration has tempered in recent months, it is nevertheless the case that since Income Support benefits for most claims are capped under the RTW Act, even a 10-12 month dispute resolution timeframe is considered slow.

4.4.4 Potential for new silicosis claims

Around two years ago, following high numbers of new interstate silicosis claims from the manufactured stone industry, a project commenced in South Australia to screen for these types of claims among higher risk workers.

As reported in our December 2019 valuation, this screening program led to the diagnosis of just over 20 workers with forms of silicosis or lung disease, although none had lodged workers compensation claims at that time. Over the 18 months since, only three silicosis claims have been reported, and there is essentially no new information to add in relation to potentially exposed workers.

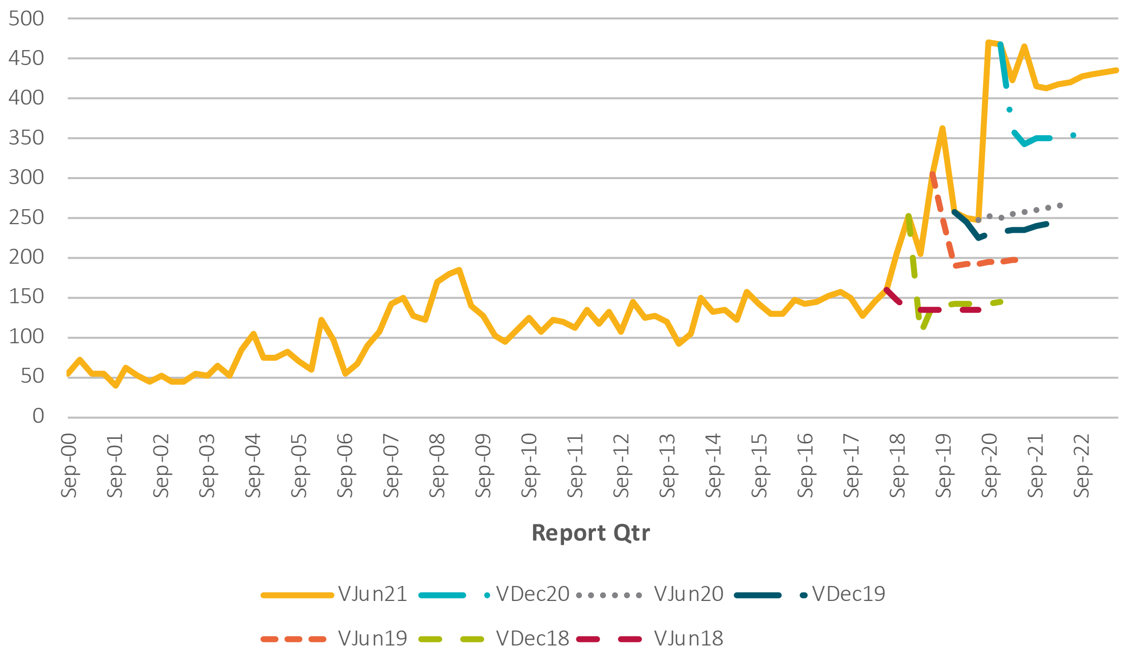
In light of this, we have continued our previous approach that no additional allowance is made in the central estimate liability on account of the known diagnoses. The potential for any additional costs is included in our risk margin considerations.

Consistent with the above observations, our previous view remains – that is, the South Australian experience with these types of claims is considerably better than in the Eastern states. As previously noted, this is believed to be a genuine difference which is attributed to a lower use of engineered stone in South Australia along with a correspondingly smaller workforce (for example, some suppliers will order in the benchtops from interstate).

4.4.5 Increasing numbers of hearing loss claims

Noise induced hearing loss claims were historically only a small proportion of total claim numbers, but their numbers have been growing rapidly. While this is in part a longer term trend, more recently it appears to be the result of targeted provider activity. Figure 4.5 below shows the numbers of new Hearing Loss claims by report quarter, along with our valuation projections over the last three years which have clearly been playing 'catch up' to the continuing growth in numbers.

Figure 4.5 – Hearing loss reported claim numbers, and projections across valuations

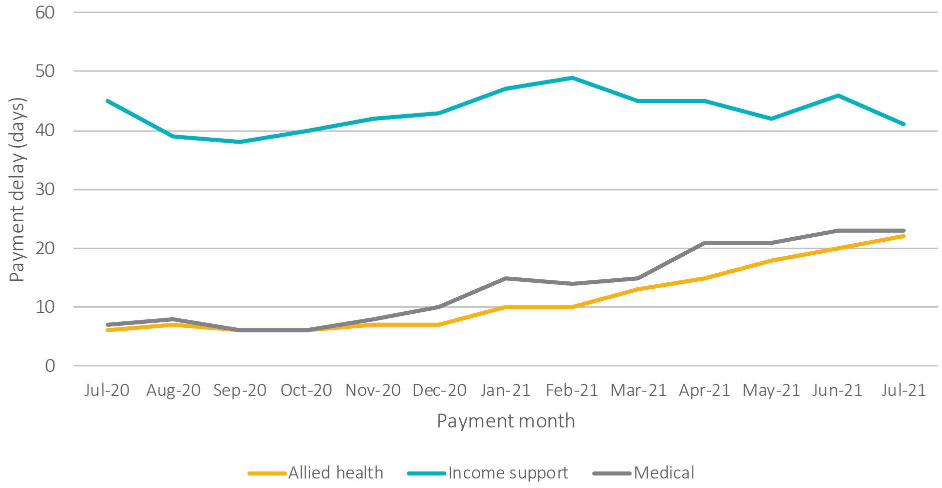


As explained in our previous report, the lower new claim numbers in the three quarters to June 2020 were due to interstate assessors that are strongly linked with certain legal firms being unable to travel to South Australia through the COVID-19 period, which meant fewer new claims emerged from these firms. Subsequent to the borders re-opening, new claim numbers reached record highs in September 2020 and have continued near that level since – at triple the level of just three years ago. The projections relating to Hearing Loss claims are discussed in Section 5.1.2 and Section 7.4.

4.4.6 Delays in payment processing

Over the past twelve months the median delay between receipt and payment of invoices for allied health and medical services has increased sharply – we understand that this is due to unexpected turnover within the claims agents that has created a backlog that is still being worked through. In contrast, delays in income support employer reimbursements have remained stable (the delays here are from the end of the income support period, and there is often a delay in employers submitting the reimbursement requests, which is why the delay is higher for income support) – we understand that there has been a priority on paying the employer reimbursements given the impacts of COVID-19 on some employers. These trends are shown in Figure 4.6 below.

Figure 4.6 – Median payment delays for medical and allied health invoices paid in FY21



The impact of this slowdown in payment speed is that some payments that would otherwise have been made in the last six months will now be made after 30 June, thereby making the payments made in the last six months appear lower than the true underlying level. In essence this means that some of the better than expected 'actual vs expected' payments in the past six months for medical and allied health services were actually just due to a slowdown in payment speed.

The calculation for our assumed proportion of expected payments for the six months to June 2021 that have been delayed until after 30 June is set out below in Table 4.2.

Table 4.2 – Payment delay impact on expected payments in six months to June 2021

Delay	Days
Payment delay at Dec-20	8.5
Payment delay at Jun-21	22.5
Increase	14
Increase (% of 6 month payments)	7.7%
Selected	**7.5%**

We have assumed that 7.5% of all medical and allied health payments that were expected to be paid in the six months to June 2021 will be paid in the upcoming September quarter, i.e. two weeks out of 26 weeks' worth of payments. We understand that ReturnToWorkSA are aware of the delays and have already been working to speed up payments and catch up the delays toward previous levels.

5 Recent claims experience

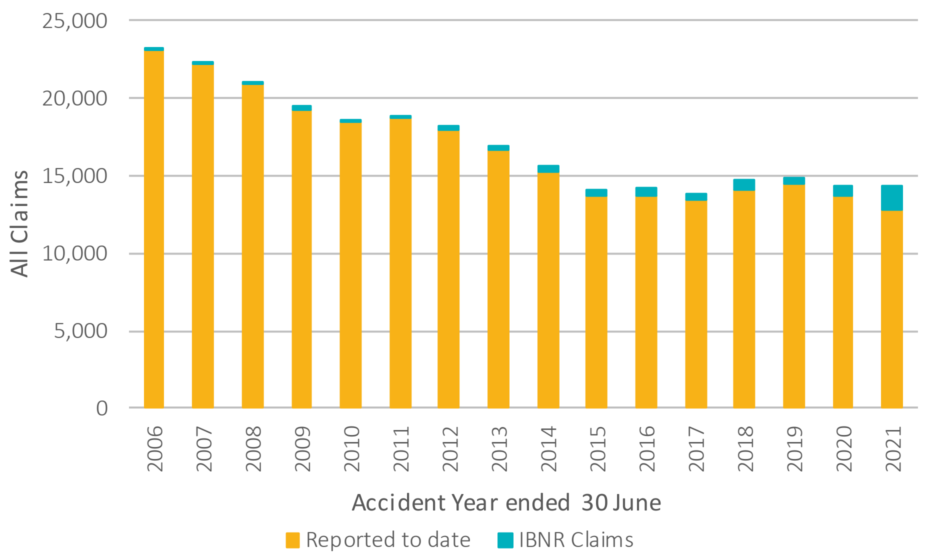
This section provides a high level analysis of scheme experience, including the numbers of new claims and overall payment trends.

5.1 Claim incidence

5.1.1 All claims

Figure 5.1 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 5.1 – Ultimate number of claims (all claims)



After a long term general downward trend, claim numbers have more or less stabilised over the last seven years, with the exception of 2018 and 2019 which saw a small increase rise in numbers.

There were three primary factors driving the higher claim numbers in 2018 and 2019:

- Claim frequency deterioration: the construction and manufacturing industries in particular experienced an increased claim frequency trend.
- Strong growth in the numbers of hearing loss and mental injury claims.
- Higher exposure growth, after an extended period of lower wages growth.

In 2020 claim frequencies then reduced again, including a materially lower result due to COVID-19 in the June 2020 quarter. The claim frequency improvement is also evident in the 2021 accident year.

Our estimate of ultimate claim numbers for 2021 has increased by 1.8% since the previous valuation and is broadly in line with the increase in wages for 2021. There were offsetting movements in our underlying valuation response which reflects the following observations:

- Hearing Loss claims continue to emerge at the highest rate ever, after a brief hiatus in activity due to COVID-19 restrictions during the March and June 2020 quarters, as explained in Section 4.4.5. We have again increased our estimate of ultimate Hearing Loss claims for 2021 and prior accident years in light of the experience.

- Mental injuries for 2021 had a small increase (5%) to reflect the higher exposure and higher volumes of claims reported to date.
- For Physical Injury claims, the emerging experience has been consistent with expectations. The previous claim frequency has been maintained, which means there is a small increase in the projected claim numbers for 2021 in line with the increase in wages.
- The development factors for Other injuries beyond development quarter two have been reduced reflecting the emerging experience. This has resulted in a slight reduction in ultimate numbers across most injury periods. For 2021, we have reduced our selected frequency on the back of lower reports to date resulting in a 16% reduction.
- There has been mixed experience in Musculoskeletal claims, with lower development for December and September 2020 quarters offset by higher development for prior periods and higher reports for March and June 2021 quarters. This experience flows through to result in a slight increase in the claim numbers for the 2020 and 2021 injury years.

5.1.2 Income support claims

Income Support (IS) claims in the valuation work are those which receive more than 10 business days of lost time benefits. This means they are already a 'more serious claim' given they have been off work for at least two weeks.

Figure 5.2 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 5.2 - Ultimate IS claim numbers

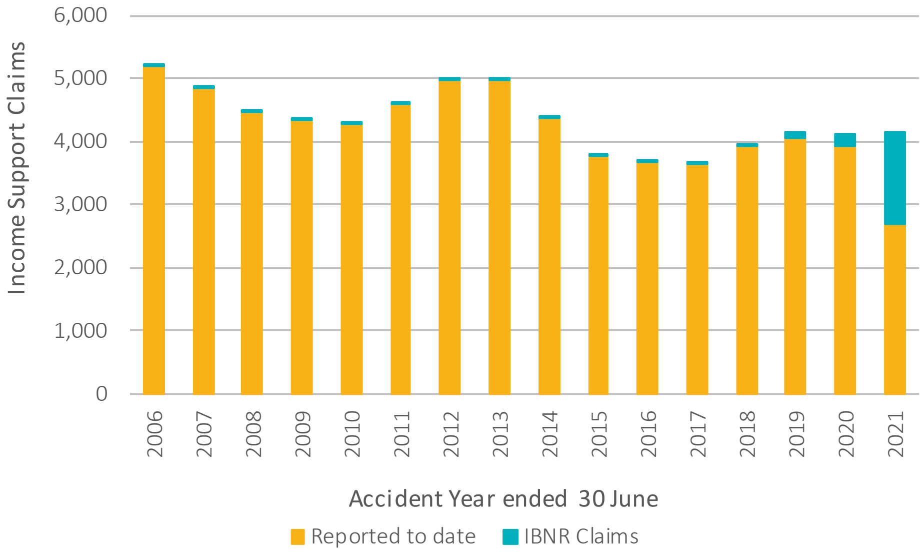


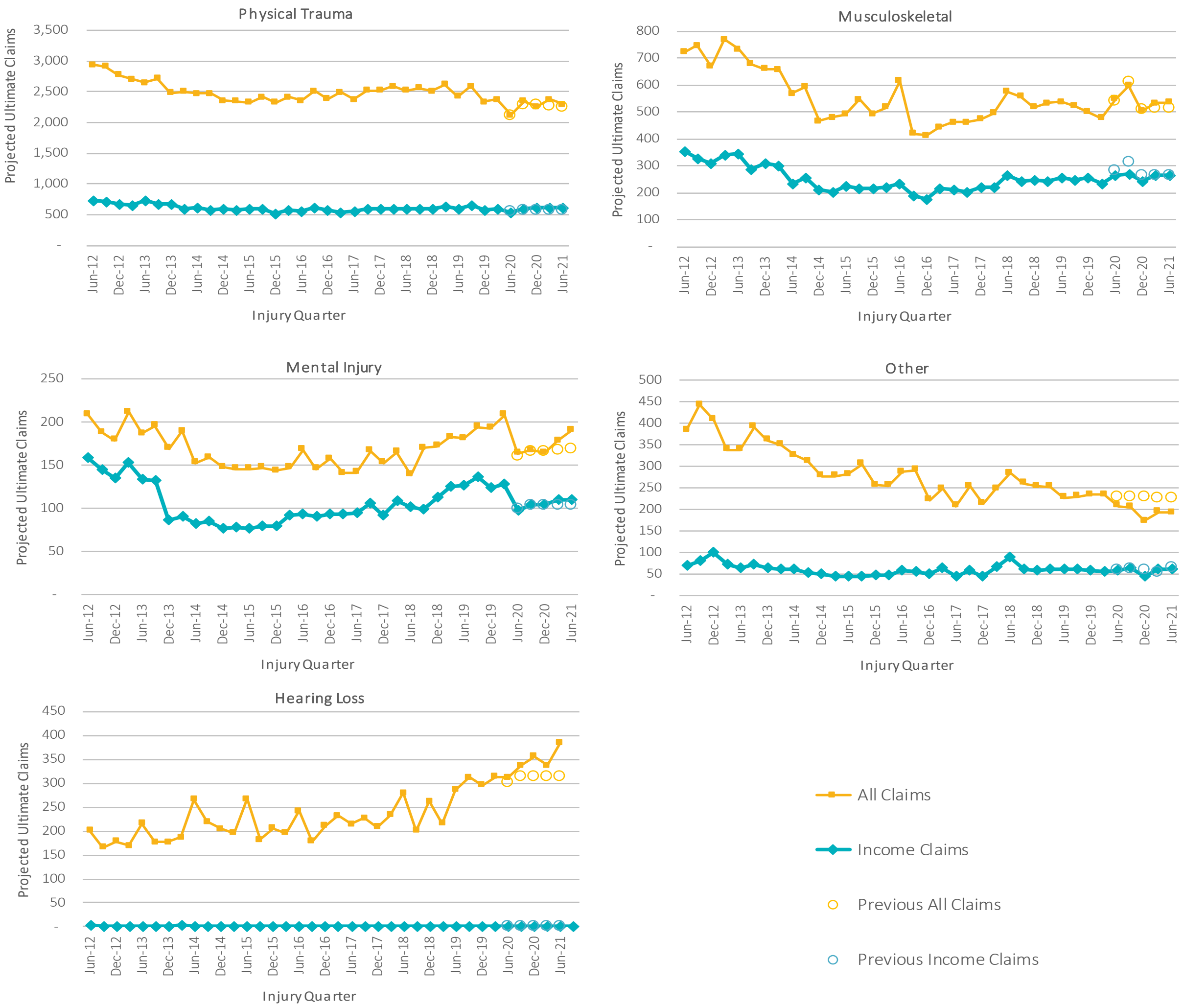
Figure 5.2 shows:

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

- For the 2020 injury year, and despite it being significantly impacted by COVID-19 and having lower claim numbers overall, we have still seen a similar number of Income Support claims as 2019 – this means the proportion of claims getting Income Support has increased, which may also indicate that the reduction in claim numbers during COVID-19 disruptions was more to do with people choosing not to report more minor injuries.
- 2021 now appears to be emerging slightly higher again with what looks to be a continuation of recent trends. The increase from 2020 to 2021 is due to a combination of lower Other and Mental injuries, offset by higher Physical and Musculoskeletal injuries. As seen in the graph, considerable development of claim numbers is still expected for the latest accident year (i.e. a lot of the projection still sits as IBNR claims), and so there is more uncertainty around the ultimate outcomes for this year.

In order to better understand the trends in IS claim numbers, we separately model claim numbers by type of injury. Figure 5.3 by injury type, the total numbers of claims as well as IS claim numbers.

Figure 5.3 – All claims and IS claims by type of injury



The key features we note from Figure 5.3 are:

- COVID-19 restrictions led to reduced claim numbers in the June 2020 quarter for Physical Trauma injuries. IS claims however did not reduce to the same extent.

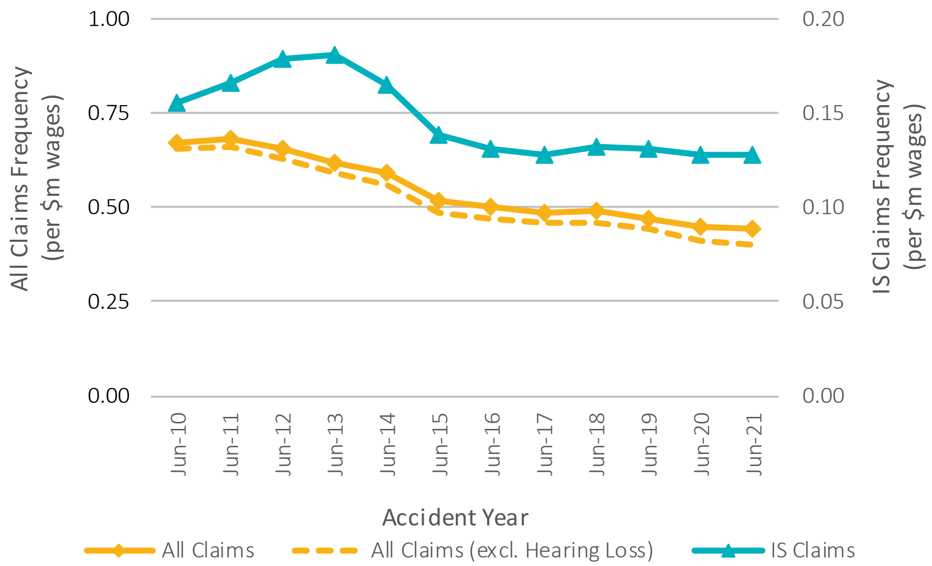
- For mental Injury claims, after a period of strong growth over the two years to December 2019, there has been a significant drop-off in the number of "All" and IS claims. "All" claims have started to trend up again over the last two quarters but the same has not yet been observed for IS claims due to higher rejection rates.
- After what appeared to be signs of a flattening off in Hearing Loss claims up to June 2020, numbers have significantly trended up again over the last year, with current levels now the highest on record. At this level, Hearing Loss claims are now at around 10% of all claims expected to be received from a new injury year, compared to more like 5-6% just three years ago.
- Musculoskeletal claims have seen an increase in claim numbers since the start of COVID-19 and this has translated into higher IS numbers as well.

The mix of claims by injury type has important implications for longer term IS claim costs, as there are noticeable differences in claim durations between the different groups.

5.1.3 Claim frequency – All claims and IS claims

Figure 5.4 compares the trends in (1) total claim frequency ('all claims' numbers from Section 5.1.1), (2) total claim frequency excluding hearing loss claims, and (3) IS claim frequency (IS numbers; Section 5.1.2). 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 5.4 – Claim frequency (claims per $m wages)



The IS claim frequency was on a similar trend to the all claims frequency prior to 2010, before diverging between 2010 and 2013. After the steep improvement in the IS claim frequency between 2013 and 2015, trends in the IS claim and all claim frequencies were broadly in line until 2018, when the IS claim frequency began to deteriorate again. While the overall claim frequency has been reducing strongly in recent years, it is not the same for IS claims with the gap growing even further between the two lines in the latest year.

The current reducing trend in the all claim numbers frequency is a product of growth in hearing loss claims offset by reducing claim frequencies in other claim types, which is broken down further in Table 5.1.

Table 5.1 – Projected ultimate claim frequency: comparison to previous

Accident Year	All claims (excl. hearing loss) Claim Freq (per $m of wages)	Year on Year % Change	Prev. Freq	Change from Prev	Hearing Loss Claims Claim Freq (per $m of wages)	Year on Year % Change	Prev. Freq	Change from Prev
Jun-18	0.46	0%	0.46	0.0%	0.03	7%	0.03	8.1%
Jun-19	0.44	-4%	0.44	-0.1%	0.03	-3%	0.03	1.0%
Jun-20	0.41	-7%	0.41	-0.2%	0.04	27%	0.04	3.5%
Jun-21	0.40	-3%	0.40	0.8%	0.04	14%	0.04	12.4%

5.2 Serious injury claims

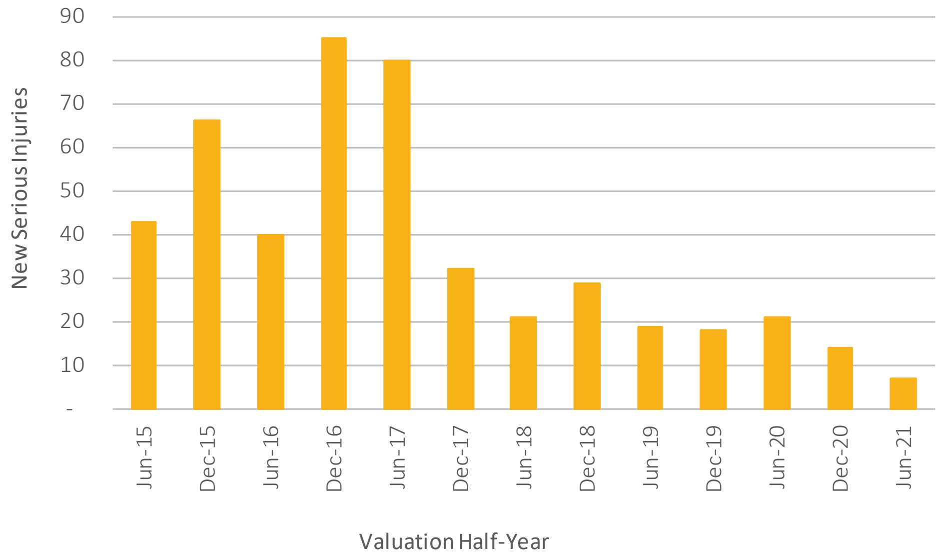
[All experience noted here is prior to the Summerfield decision.]

The Serious Injury threshold of 30% WPI is the most material scheme boundary from a financial perspective.

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

We are now six years into the RTW Act, and the emergence of Serious Injury claims from the transitional cohort has continued for much longer than expected. Even though very few (non-Serious Injury) pre-RTW Act claims are still in receipt of Income Support payments, Serious Injury claims continue to emerge and the number of open Serious Injury application disputes and/or unresolved WPI disputes remains high, as was discussed in Section 4.4.2; we are also now seeing similar types of behaviour from RTW Act claims. This means there continues to be uncertainty around Serious Injury claim numbers well beyond when claims hit the two year Income Support boundary. Figure 5.5 shows the emergence of the current cohort of Serious Injury claims for transitional periods by six monthly period (excluding Severe Traumatic injuries as these tend to be identified quickly).

Figure 5.5 – Newly Identified Serious Injury Claims - Transitional claims only

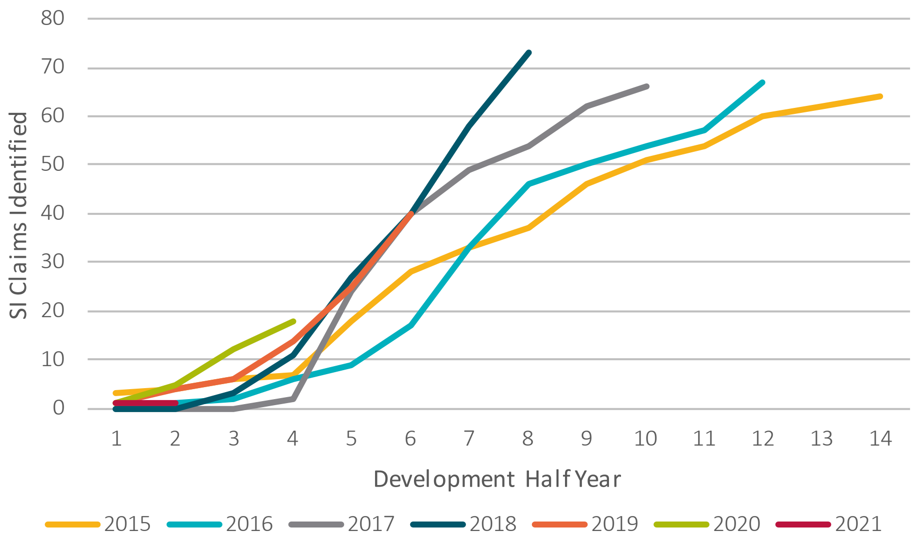


Over the past 12 months there has been a more consistent reduction in the number of Serious Injury claims identified, although the runoff is still much slower than we originally anticipated with an additional seven claims identified in the last six months.

Although the number of new Serious Injury claims being identified has continued for longer than anticipated, the pressure on ultimate claim numbers has been lower than it otherwise would have been due to a partial offset by the removal of some claims from the 'potential' group as additional information became available. Given there are relatively few 'potential' claims left, any continued late identifications will likely result in upward revisions to ultimate Serious Injury claim numbers. As such, the number of new identifications needs to quickly reduce toward zero for ultimate claim number estimates to not increase.

For RTW Act periods the emergence of Serious Injury claims continues to quicken, following changes ReturnToWorkSA has made to the claims management model to aid early identification as discussed in Section 4.4.1. As explained above, it is likely that a small number of identified claims, mainly for more recent accident years, will become 'outs' in future, and this will somewhat help to 'flatten off' the emergence pattern. The emergence pattern for recent accident years is shown in Figure 5.6 below.

Figure 5.6 – Serious Injury Emergence for Recent Accident Years



There are two key features worth noting:

- There continues to be late identification of Serious Injury claims in the earlier accident years, highlighted by the absence of any real ‘flattening off, even well beyond the two year Income Support cap.
- The number of claims identified for more recent accident years is clearly higher at earlier stages; while we know there were conscious efforts to identify likely Serious Injury claims sooner, it is not year clear whether this is just a speed up in the identification, or partly a deterioration. Our current assessment is that it appears to be a combination of both:
  - The gap between the 2016 and 2017 accident years was around 25 claims at development half year six. This has narrowed to closer to 10 claims at development half year 10, suggesting that claims are being identified more quickly.
  - However, 2018 already has more claims identified than the preceding three accident years suggesting that claim numbers will end up higher for this accident year.

The combination of these features makes it difficult to rely on historical patterns to project ultimate claim numbers for more recent years.

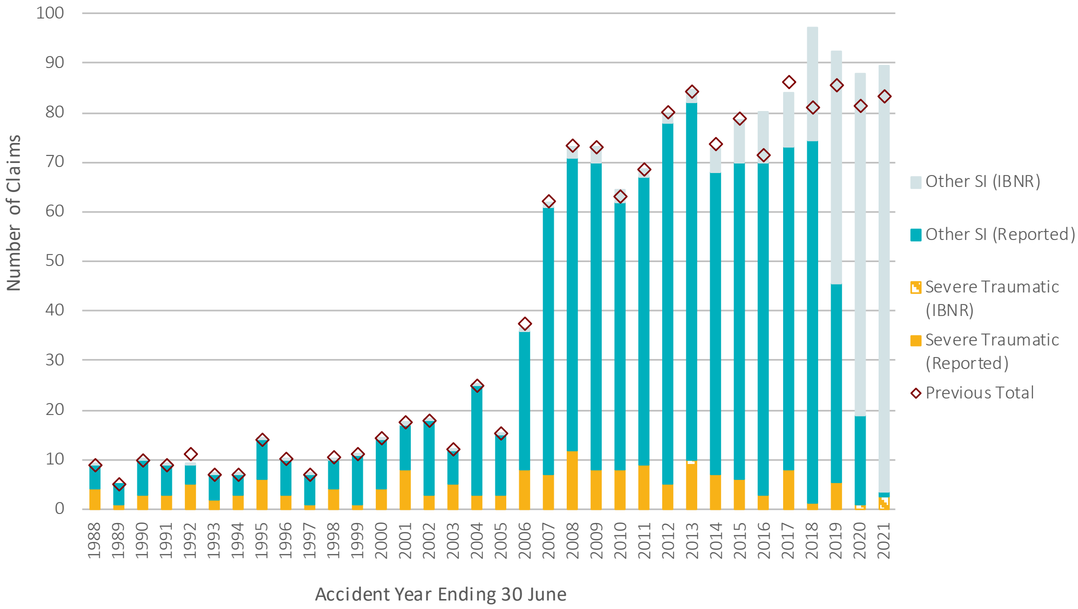
Given this, our approach to setting ultimate Serious Injury numbers (other than Severe Traumatic Injury claims) uses a similar framework to previous valuations:

1. For 2018 and prior accident years the IBNR is an explicit allowance, based on:
   a. the number of claims with either a Serious Injury dispute, Serious Injury application or WPI activity initiated
   b. plus a loading for claims to be identified from outside these sources (which we then add to the identified Serious Injury claims to give the ultimate).

   The approach for these periods is largely unchanged from the previous valuation, with the exception of the extension to the 2018 accident year. However, we have worked with ReturnToWorkSA to further solidify the IBNR sources which resulted in minor changes to the source definitions, as well as reviewing both our conversion assumptions for the identified IBNR sources and the additional IBNR loading on top of this.
2. For 2019 and later accident periods, we have increased the ultimate number of claims to sit between the 2017 and 2018 accident years. While the factors that influenced the higher claim numbers for 2018 are likely to also influence the 2019 accident year to a certain extent, an end to end review of Serious Injury claims by ReturnToWorkSA has identified some key areas where improved decision making should result in fewer Serious Injury claims going forward. This is discussed in more detail later in this section.

Figure 5.7 shows our resulting estimated numbers of Serious Injury claims by accident year.

Figure 5.7 – Serious Injury Claim Numbers by Accident Year



The key features we note from this are:

- The number of identified Serious Injury claims prior to 2007 is low, which is a result of past redemption activity removing such claims from the scheme.
- For Severe Traumatic Injuries, which tend to be identified quickly, the estimates for each accident year generally give credibility to experience to date. The 2018 and 2020 years look like being very low years for Severe Traumatic Injuries, whereas the 2017 and 2019 years look higher (although it is still lower than the 2007 to 2013 years).
- For 2015 and prior accident years there has been little change to the ultimate number of claims.
- For the 2016 and 2018 and later accident years the estimate of ultimate Serious Injury claims has increased. This reflects the continued emergence of Serious Injury claims well beyond the two year Income Support boundary, as well as the high levels of claims already identified for more recent accident years, most notably for 2018. With 2018 already having more Serious Injury claims identified than the preceding four accident years, it is unlikely that the 2018 accident year will not have higher ultimate Serious Injury numbers.
- 2019 and more recent accident years have been set between the 2017 and 2018 accident years, with variation among these years a result of differences in the level of Severe Traumatic Injury claims.

At this stage we have only given partial weighting to the 2018 year when setting estimates for 2019 and more recent accident years. This partially reflects a reluctance to rely just on a single accident year, particularly given it is not fully developed and the identification pattern has also been changing. Secondly, it also acknowledges the outcomes of a review by ReturnToWorkSA aimed at identifying reasons for higher than originally expected Serious Injury numbers, which is currently in the early stages of being implemented. The review focussed on claims from the 2016 to 2018 accident years, and the key findings were:

- One agent had errors in the technical decision making for WPI assessments, that coincided with the loss of key staff in WPI positions. This led to certain injuries being combined that should have been separated, resulting in higher WPI scores and some claims reaching the Serious Injury threshold.

- Pre-existing injuries were not sufficiently identified or addressed early in the life of the claim, which led to them being managed as part of the workplace injury over time.
- There were insufficient investigations into claim eligibility, including what trauma gave rise to additional injuries and whether this was linked to employment.
- The risks and necessity of surgery were not fully considered. When the risks are realised, it can lead to a more serious injury, whereas without surgery the claimant would have had a lower level of impairment.

As a result of this work ReturnToWorkSA has implemented a Serious Injury Strategy plan, of which one of the outcomes will be a monthly review of new Serious Injury claimants. The aim is to understand why each claim was considered Seriously Injured, and whether any action needs to be taken to limit the risk and/or change claims management practices. Although eligibility decisions are usually made prior to the WPI assessment, they can be revisited at this point, meaning that some of the learnings from these reviews can be immediately applied on existing claims, rather than the impact only being observed for new accidents; however, we expect there will be some difficulty in changing eligibility decisions at the point WPI assessment – at least without triggering disputation – and so we have only given partial weight to the potential of this strategy to reduce Serious Injury claim numbers.

Overall we have allowed for 277 IBNR claims in our projections, which equates to 3.1 injury years' worth of claims.

Underpinning our IBNR allowance is the assumption that the speed up in the identification of Serious Injury claims in recent years reduces the tail of claims identified well beyond the two year Income Support cap. If this does not hold, or the late identification of Serious Injury claims for older years does not start to run off soon, there will need to be material increases for both the outstanding claims liability and the breakeven premium rate for future years.

To put our allowances for future Serious Injury claim numbers into context, we compare the remaining IBNR allowance for each accident year with the number of claims sitting in each 'IBNR pool' and other remaining open claims in Table 5.2 below.

Table 5.2 – Serious Injury IBNR vs remaining open claims (2018 and prior accident years)

Accident Period	SI Application[1]	WPI Activity[2]	Other Open	Total Open Claims[3]	Serious Injury IBNR	IBNR
Prior	6	54	153	213	3	1.2%
2007	1	6	16	23	1	3.3%
2008	5	8	18	31	2	6.6%
2009	9	11	15	35	3	8.6%
2010	6	17	21	44	2	5.4%
2011	5	10	35	50	2	3.0%
2012	3	12	19	34	2	4.8%
2013	6	24	38	68	3	3.9%
2014	11	36	56	103	5	4.8%
2015	18	42	74	134	9	6.5%
2016	16	121	149	286	10	3.6%
2017	14	190	156	360	11	3.1%
2018	37	311	285	633	23	3.6%
Total	137	842	1,035	2,014	75	3.7%

[1]Either in SI application dispute, or recent application without decision
[2]WPI assessment not completed, or WPI/s7 dispute
[2]Excluding claims already counted as SI and NIHL

Table 5.2 demonstrates that the allowances for remaining open claims to reach the Serious Injury threshold are low proportions of the open claims pool; it would take only small deviations from this to have large consequences for the outstanding claims liability – particularly for the 2018 accident year where around 600 claims remain open. There is therefore more risk that our IBNR is too low than too high.

In summary, there remain a number of risks to our current estimates of Serious Injury numbers (even before the impacts of *Summerfield* are considered):

- Due to high levels of redemptions and differences in recording of WPI it is difficult to use 2013 and prior experience in estimating ultimate numbers for more recent accident years.
- No year after 2014 has as yet demonstrated a clear run off pattern for new Serious Injury claims, meaning we don't as yet have a clear indication of how much longer to anticipate new Serious Injury claims will continue to be identified. In the absence of this we have set the IBNR allowance from 2014 to 2018 based on the number of claims that have started either the Serious Injury or WPI application process; however, this pool of claims is also yet to reach maturity, as new claims have continued to commence activity over time despite the relatively old claim age, and small deviations between the assumed and actual conversion proportion could materially impact numbers.
- The process for identifying potential Serious Injury claims has been refined over recent years, which has coincided with higher numbers of claims being identified at earlier durations. It is difficult to know whether this is a speed up, or a deterioration; current indications are it is likely to be a combination of both.
- The increase in Serious Injury numbers for 2018 coincides with a deterioration in claims performance on Short Term Claims (resulting in a significant increase in the number of claims reaching the Income Support boundary) and problems with some claim management activities at the claims agents.

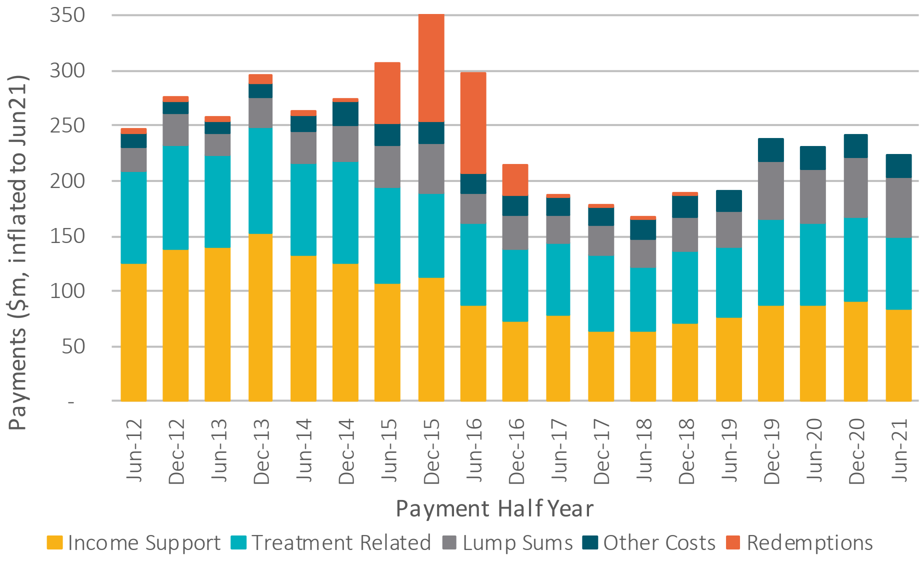
  At this stage we have not established any direct causation between the increase in numbers reaching the Income Support boundary and the increase in Serious Injury claims, and so we have not extrapolated this to more recent accident years. If there is a more direct link between claims hitting the Income Support boundary and Serious Injury numbers, then it is likely our estimates for more recent accident years will need to increase.
- Numbers presented here are prior to any *Summerfield* impact, which will materially increase Serious Injury numbers if the decision is maintained on appeal, as discussed in Section 11. Even without *Summerfield*, claimant and legal behaviour have contributed to a sustained pressure on the Serious Injury threshold, and to date this appears to have led to additional Serious Injury numbers than were seen prior to the introduction of the 30% WPI boundary.

Given the high value of Serious Injury benefits, higher than expected Serious Injury claim numbers would materially increase the liability.

5.3 Overall payment experience

Figure 5.8 shows gross claim payments (before recoveries) in half-yearly periods over the last ten years, inflated to current values.

Figure 5.8 – Gross Claim Payments ($Jun21)



Gross payments of $224m in the last six months were down 7% from the previous period across most payment types:

- Income Support payments reduced by 7% over the past six months, following a 3% increase in the previous period. There are two offsetting factors impacting this: improved RTW rates at mid to longer durations are reducing payment levels, while an increase in new IS claims is putting upward pressure on payments.
- Treatment related costs reduced by 14%, following a 3% increase in the previous period. As explained in Section 4.4.6, we believe that some of this reduction is explained by a slowdown in payment speed.
- Lump sum payments reduced slightly (by 1%), with payments having been at similar levels over the past two years. Prior to this there were steep increases in payment levels over the June 2018 to December 2019 period, as activity in the Transition project resulted in more payments.

After allowing for recoveries of $6.4m in the last six months, net claim payments of $216.6m were $11.6m (5%) lower than projected at the previous valuation – again, we believe that around $4.4m of this is explainable by slowdowns in payment processing. Table 5.3 shows the breakdown.

Table 5.3 – Payments: Actual vs Expected

Entitlement Group	Six Months to Jun-21				Split by Category	
	Actual	Expected	Act - Exp	% A - E	Short Term	Serious Inj
	$m	$m	$m		$m	$m
Income support	84.1	86.2	-2.1	-2%	-2.5	0.5
Redemptions	0.0	0.0	0.0	n/a	0.0	0.0
Lump sums	53.5	56.0	-2.5	-4%	-4.2	1.7
Worker legal	8.8	8.1	0.7	9%	0.8	-0.1
Corporation legal	10.4	11.0	-0.7	-6%	-0.2	-0.5
Medical	37.0	40.0	-3.0	-7%	-1.7	-1.3
Hospital	8.0	10.1	-2.1	-21%	-1.8	-0.3
Travel	2.4	2.9	-0.5	-18%	-0.4	-0.1
Rehabilitation	4.6	5.2	-0.6	-12%	-0.6	0.0
Physical therapy	5.3	6.1	-0.8	-13%	-0.7	-0.1
Investigation	1.0	1.1	-0.1	-7%	-0.1	0.0
Other	7.8	7.6	0.2	2%	-0.4	0.6
Common law	0.0	0.1	-0.1	-100%	-0.1	0.0
LOEC	0.1	0.1	0.0	11%	0.0	0.0
Commutation	0.0	0.2	-0.2	-100%	-0.2	0.0
Gross Payments	223.0	234.8	-11.7	-5%	-12.1	0.4
Recoveries	-6.4	-6.5	0.1	-2%	-1.7	1.8
Net Payments	216.6	228.2	-11.6	-5%	-13.9	2.3

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

- Income support payments were below expected; payments were above expectations for Serious Injury claims and below expectations for Short Term claims.
- Lump sum payments were below expected; payments were above expectations for Serious Injury claims and below expectations for Short Term claims.
- Treatment costs were below expected, which is partly explained by payment processing delays.
- Worker legal costs were slightly higher than expected, and remain at high levels.

Our valuation basis for Short Term claims is discussed in the following sections: Income Support and related expenditure in Section 6; Lump sums in Section 7; treatment related expenditure in Section 8 and all other entitlements in Section 9. Section 10 discusses our valuation of Serious Injury claims.

6 Income support – short term claims

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

We note that the valuation assumptions and impact described here relate only to the 'baseline valuation' (see Section 3.1 for more information). The additional cost due to *Summerfield* is detailed in total in Section 11.

6.1 Summary of results

Table 6.1 summarises the movements in our liability estimates for IS payments since the December 2020 valuation.

Table 6.1 – Valuation Results: Income Support

Valuation Results: STC Income Support			
Dec-20 Valuation	$m	$m	$m
Estimated Liab at Dec-20	165.4		
Projected Liab at Jun-21	163.1		
Jun-21 Valuation		AvE pmts	Actl Release
Impact of experience/OSC - valuation release	3.9	(2.5)	(1.4)
Estimated Liab at Jun-21 (Dec-20 eco assumptions)	**167.0**		
Impact of change in eco assumptions	0.3		
Estimated Liab at Jun-21 (Jun-21 eco assumptions)	**167.4**		

At June 2021 there is an actuarial strengthening of $1.4m, reflecting the claims experience since December 2020, and our valuation response relating to this claims experience. The actuarial strengthening comprises an increase of $3.9m in the liability estimate combined with $2.5m lower payments than expected over the past six months.

The impact of economic assumptions is minor.

6.2 Experience vs expectations

6.2.1 Payments

Table 6.2 compares the IS payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 6.2 – Actual vs Expected Payments: IS

Accident	Payments in Six Months to Jun 21			
Period	Actual	Expected	Act - Exp	Difference
	$m	$m	$m	
To 30 Jun 05	0.3	0.2	0.1	48%
2005/06 - 2014/15	0.9	0.9	0.0	3%
2015/16 - 2017/18	2.2	2.3	(0.1)	-3%
2018/19 - 2019/20	35.8	38.9	(3.1)	-8%
2020/21	28.0	27.5	0.5	2%
Total	67.2	69.8	(2.5)	-4%

IS payments were 4% ($2.5m) lower than expected overall in the six months to June 2021. This was due to:

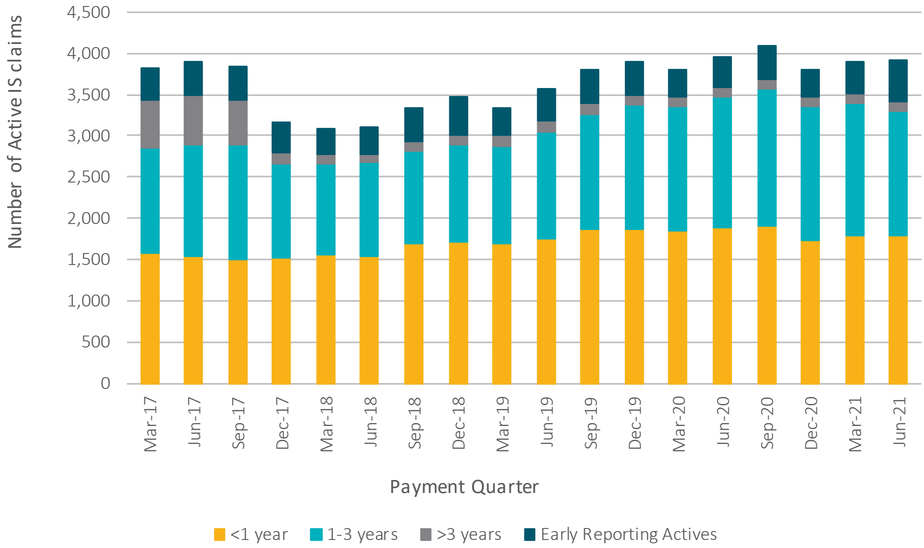
- $3.1m of lower payments for the 2018/19 and 2019/20 accident years following improved return to work rates and lower average payment sizes.

- $0.5m of higher payments for 2020/21 year relating to higher income claim numbers than expected.
- $0.1m higher payments for 2014/15 and prior years primarily relating to dependent benefits.

6.2.2 Active claims and exits

Figure 6.1 shows the numbers of (quarterly) active IS claims, by duration, since the RTW Act came into effect.

Figure 6.1 – Numbers of Active IS Claims



The impact of the 104 week boundary on IS payments can be seen in December 2017 with the exit of longer term claims. Since June 2018, active claim numbers then steadily increased, from just over 3,000 claims per quarter to over 4,000 in September 2020. This increase was due to a combination of higher exposure, deteriorating claim frequency and longer claim durations. The fastest growth was in 1-3 year actives, which grew by more than 40% since September 2018.

The December 2020 quarter then saw a significant improvement in the number of active claims, dropping from above 4,000 in September to around 3,800 active claims in December due to fewer <1 year duration claims. This improved performance has continued in the March 2021 (total actives 3% higher than December 2020) and June 2021 quarters (unchanged from March 2021).

In Table 6.3 we compare the numbers of active IS claims at June 2021 with our December 2020 valuation projection. This has been done only for periods where we projected future active claims at the June 2020 valuation (accident quarter March 2018 and later).

Table 6.3 – AvE Active Claims

Accident Quarter	Proj from Dec-20 Val	Actual Actives	Act *less* Proj	Diff as % Proj
Sep-18	16	18	2	15%
Dec-18	30	32	2	7%
Mar-19	80	84	4	5%
Jun-19	237	229	-8	-3%
Sep-19	289	278	-11	-4%
Dec-19	286	279	-7	-3%
Mar-20	313	284	-29	-9%
Jun-20	344	312	-32	-9%
Sep-20	398	421	23	6%
Dec-20	513	494	-19	-4%
Mar-21	627	696	69	11%
Jun-21	174	178	4	2%
Total	3,307	3,305	-2	0%

Overall, active claim numbers at June 2021 for these periods were in line with expectations, although higher than expected for the latest accident year, offset by better performance for the 2019/20 accident year.

6.3 Modelling of STC IS payments

Our modelling approach for IS payments involves:

- **For all IS payments in the first three years after injury (development years 1 to 3) – a PPAC model** which models all IS entitlements at these durations; this includes IS payments to dependants, late IS payments (back-pay), claims with 'late starting incapacity' and IS payments made following surgery where the claimant would not otherwise have been entitled to IS.

  We model IS entitlements separately for five main injury groups: Injury, Musculoskeletal, Psychological, Hearing Loss and Other. The split allows us to better reflect the specific continuance and average size profiles of each claim segment, and allow for the changing mix of injuries over time.

- **For all IS payments more than three years after injury (development years 4 and later) – a PPCI model**, which splits out IS payments to dependants from other IS payments (mostly back-pay and IS payments following surgery). This PPCI model uses total claim numbers (not just IS claims) as the base.

Detailed valuation assumptions for Hearing Loss claims are not provided in Section 6.4, on materiality grounds, and these can be found in Appendix F. In the last five years there have been around two Hearing Loss claims per accident year that receive income support payments, and the separation of Hearing Loss is of less relevance for IS payments than it is for other payment types.

6.4 Valuation basis

6.4.1 IS payments in years 1-3: PPAC model

In this section we show the June 2021 continuance rate and PPAC selections for each individual injury group and compare them to the December 2020 selections. Later, we show the overall assumptions compared to the December 2020 valuation, to demonstrate the overall movement in the basis.

As explained above there are two main components to the modelling:

- Projected active claims: based on historical claims performance, as well as expectations of how this performance will emerge in future.

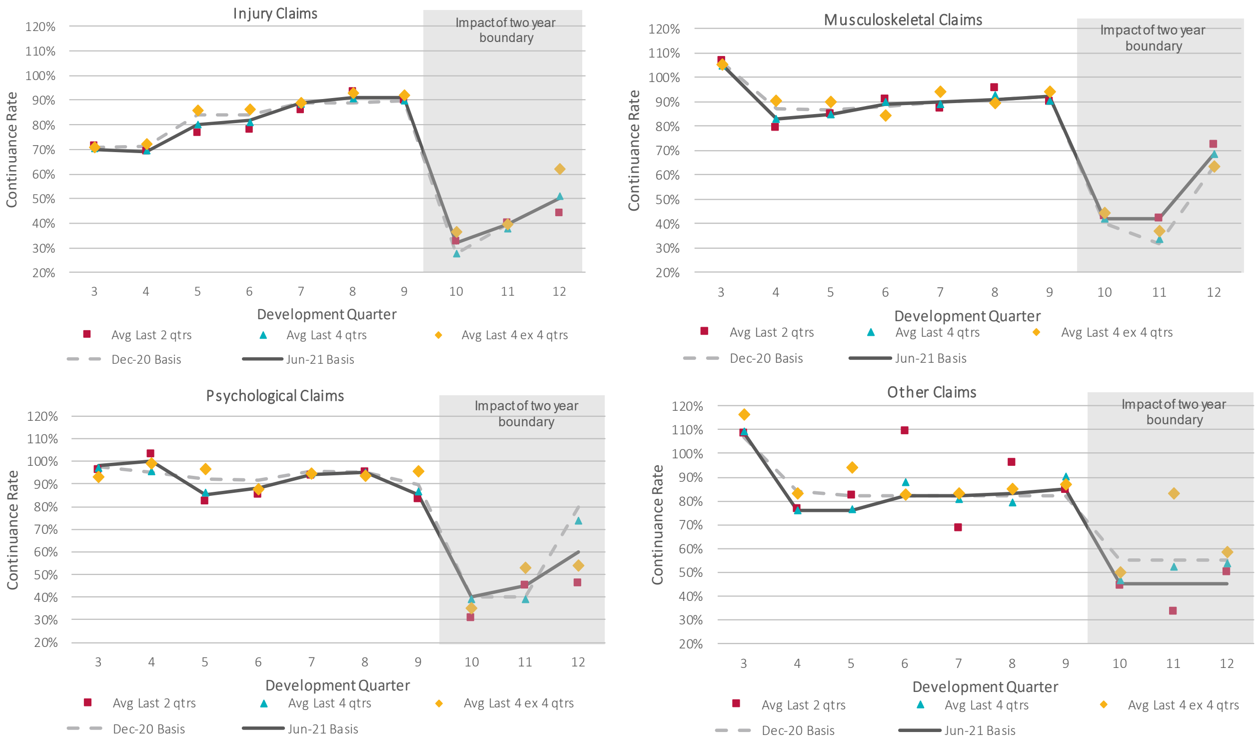
- Projected average payment size (PPAC): based on historical claims performance.

These two components of the income cost projection are described in more detail below.

Projection of active claims

Figure 6.2 below shows the recent continuance rate experience and our adopted bases at the December 2020 valuation and the current valuation for each injury segment.

Figure 6.2 – Continuance rates – by injury group

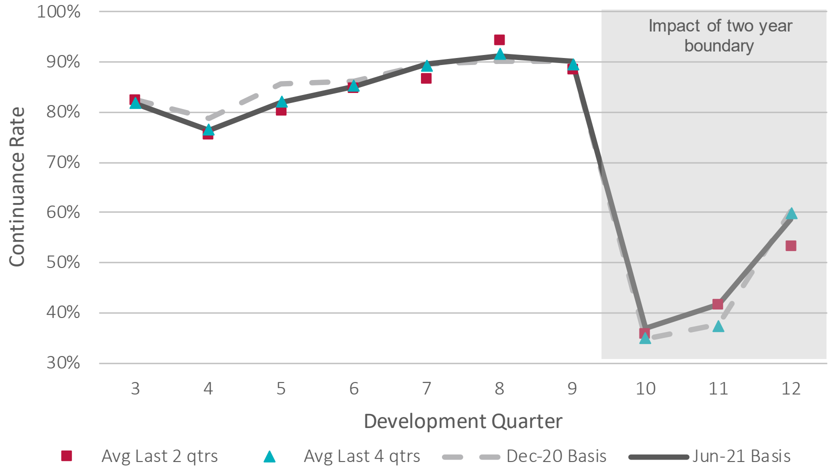


The valuation basis has been set close to the latest experience represented by the averages of the last 2 and 4 quarters. The 'average 4 excluding 4' metric shows the experience for FY2020, for comparison with the experience of the FY2021 ('average last 4'). The key take-outs from Figure 6.2 include:

- There was an improvement (i.e. reduction) in the continuances rates across all injury types in the last year, particularly in the periods DQ4 to DQ6 post injury.
- The changing dispute rates for psychological claims mean that the continuance rate in DQ4 has increased, with improving performance in DQ 5-6. This pattern results from fewer claims initially getting paid (in DQ1 and DQ2), with the claims who get payment after dispute then causing the higher DQ3 and DQ4 continuance rates; in aggregate there are fewer claims remaining on benefit at these durations.
- The experience beyond DQ6 is broadly unchanged from December 2020 basis.
- Experience in DQ 10 – 12 has been reshaped in line with recent experience, although we note there is limited cost in this period.

Figure 6.3 shows the combined continuance rates compared to those selected at December 2020.

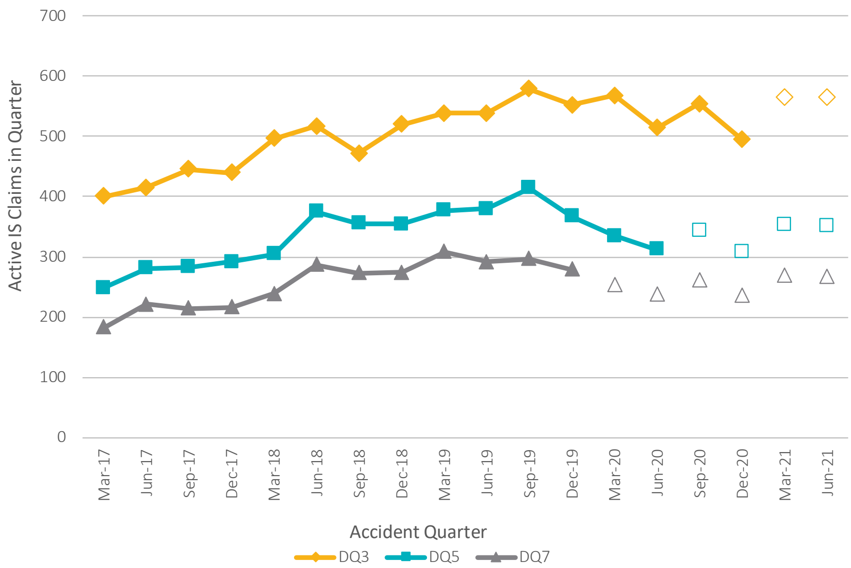
Figure 6.3 – Continuance rates – implied overall assumptions



The overall average continuance rates are lower at this valuation, reflecting the improvement in continuance rate experience over the last twelve months as indicated by the two and four quarter average in Figure 6.3. The main area of improvement has been at 'mid' durations, with continuance rates decreased out to development quarter seven. As discussed above, the lower continuance rates can be observed across all injury groups.

Figure 6.4 below shows the outworking of our projection of active claims at development quarters 3, 5 and 7. The solid lines show the actual number of active claims and the dots show our projection.

Figure 6.4 – Income Support claims reaching specified durations



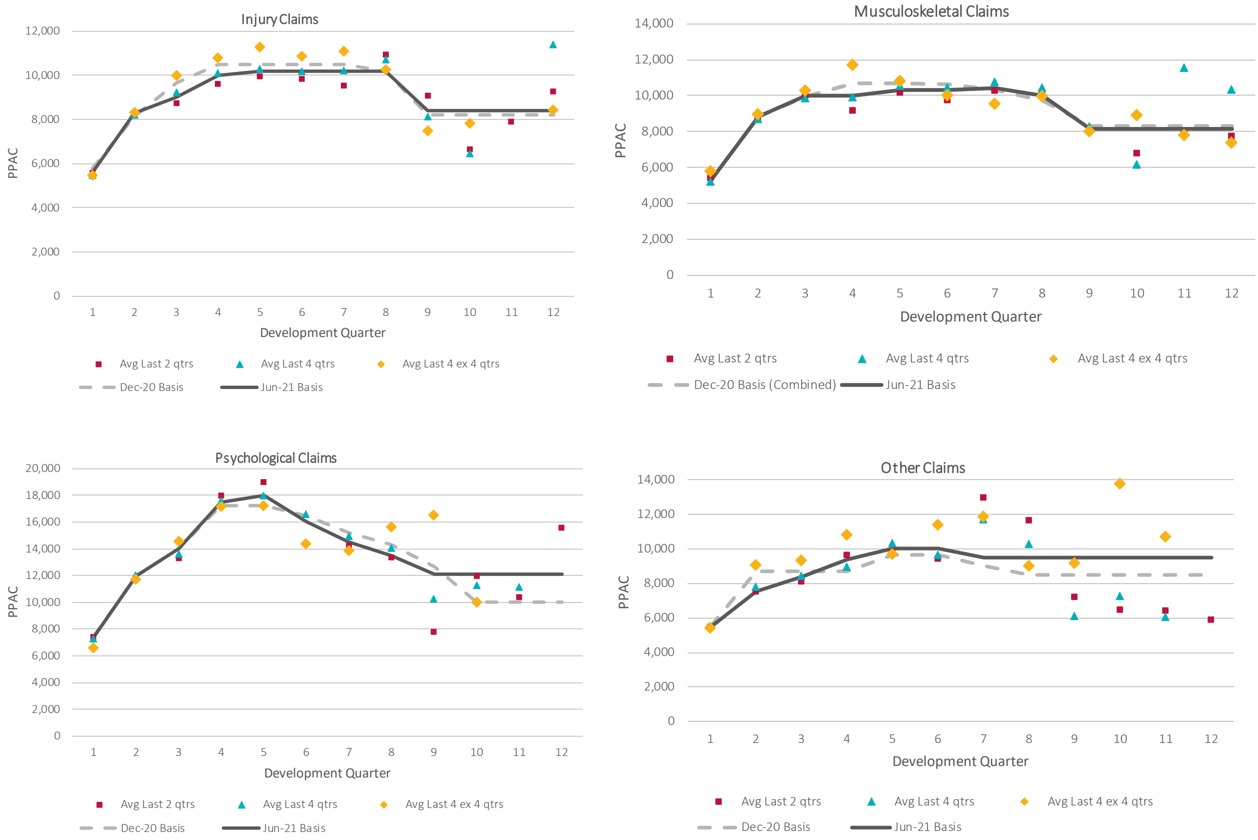
As Figure 6.4 shows, active IS claim numbers had been increasing steadily between the March 2017 and September 2019 quarters. Our projections suggest that active claim numbers at DQ5 and DQ7 have now peaked, with the projections moving lower than their recent peaks.

The March and June 2021 quarters are expected to increase on the back of recent trends in new claim reports. This is a result of increasing income claim frequency observed in the most recent accident quarters.

Payments per active claim

Figure 6.5 below shows the recent PPAC experience and our adopted bases at the December 2020 valuation and current valuation for each injury segment. There are clear differences in payment levels for the different injury type segments.

Figure 6.5 – Payments per active claim ($Jun-21): injury groups

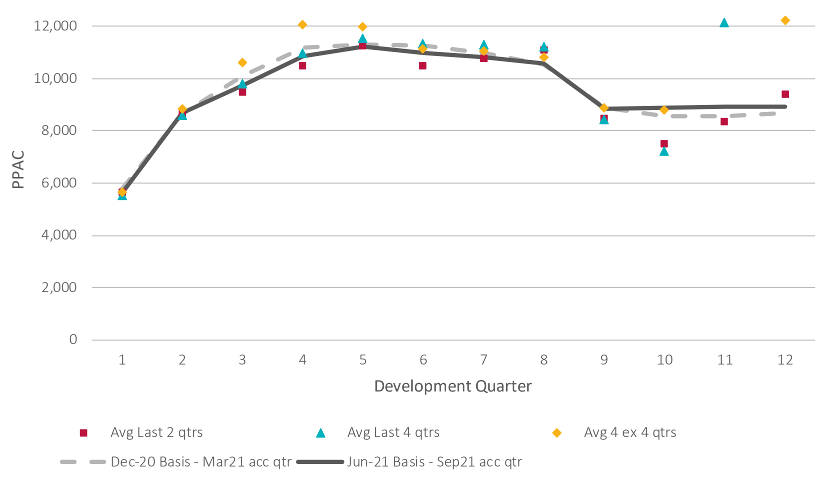


The key take-outs from Figure 6.5 include:

- The selected basis for Injury and Musculoskeletal claims is lower than previous and is consistent with the average over four quarters. The lower PPAC reflects a higher proportion of partial return to work payments and more workers ceasing IS payments partway through the payment quarter as a result of the improved RTW rates. Experience in the last two quarters has continued this improving trend.
- The PPAC for Psychological has a higher peak than for other segments, which is due to a longer time to decision and higher level of disputation that leads to backpay. The PPACs have generally been lower in the last six months for payments beyond DQ6, and this is reflected in the selected basis.
- The basis for Other claims has been reshaped at this valuation, with lower sizes at earlier durations offset by higher sizes at longer durations. This is consistent with the experience emerging over the last 4 quarters.

Figure 6.6 shows the combined payment per active claim compared to that selected for December 2020.

Figure 6.6 – Payments per active claim ($Jun-21): implied overall assumption



The recent overall PPAC experience is emerging lower than our December 2020 basis up to development quarter eight. We have responded with an overall reduction in our adopted PPACs as shown.

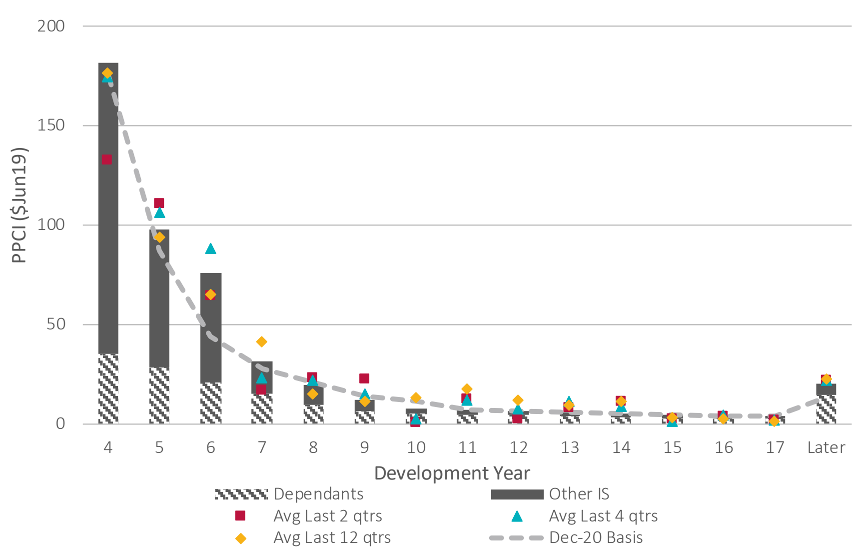
6.4.2 IS payments after year 3: PPCI model

The overall adopted average PPCI size of about $483 per reported claim is made up of two components:

- The allowance for ongoing dependant claim benefits of $160 per reported claim; this is 18% higher than our previous allowance which reflects higher recent experience.
- An allowance for post-surgery IS payments, claims with 'late starting incapacity' and claims with back-pay (usually after a dispute is resolved), of about $323 per reported claim, up 10% from our previous allowance. This increase reflects the higher emerging experience for RTW Act accidents which are getting greater weight in the assumptions.

Figure 6.7 shows the adopted PPCI basis and its components. As this shows, the selected basis has been increased and is consistent with the average over the last 3 years; given the number of claims with payments is relatively small we are generally less responsive to short term variability in this segment of the modelling.

Figure 6.7 – Adopted Income Support PPCI basis (average IS cost per reported claim)



6.5 Valuation results and actuarial release

Table 6.4 sets out the components of the actuarial release for IS payments.

Table 6.4 – Components of Actuarial Release: Income Support

Release (strengthening) due to		
	$m	$m
AvE payments in six months		2.5
Difference from projected liability		
IS claims and actives experience	(3.6)	
Continuance rates	4.4	
PPACs	1.2	
PPCI model	(5.9)	
Baseline valuation total		(3.9)
Total		(1.4)

The actuarial strengthening of $1.4m is made up of payments in the six months being $2.5m lower than expected, and a $3.9m increase in the projected liability from December 2020 composed of the following changes:

- A $3.6m increase due to actual active claim numbers at June 2021 being higher than projected
- A $4.4m decrease as a result of improvements in the continuance rates used to project future IS claim numbers ('Continuance rates').
- A $1.2m decrease as a result of the improvements in average sizes used to project future IS claim payments ('PPACs').
- A $5.9m increase due to changes in payment assumptions relating to tail costs (PPCI model).

Table 6.5 summarises these movements by accident period.

Table 6.5 – Actuarial Release for Income Support

Accident Period	Projected Liab at Jun 21 from Dec 20 Valuation	Jun 21 Estimate on Dec 20 Eco Assumps	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 21	Actuarial Release	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	1.3	2.5	1.2	0.1	(1.3)	-105%
2005/06 - 2014/15	8.4	9.4	0.9	0.0	(1.0)	-12%
2015/16 - 2017/18	9.3	10.8	1.5	(0.1)	(1.4)	-16%
2018/19 - 2019/20	45.2	45.1	(0.1)	(3.1)	3.2	7%
2020/21	98.9	99.2	0.3	0.5	(0.8)	-1%
Total	163.1	167.0	3.9	(2.5)	(1.4)	-1%

All the movements are relatively small compared with the liability of more than $160m. The most noteworthy is the increase in tail payment assumptions following the identification of more dependency payments that extend for longer periods.

7 Lump sums – Short term claims

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

We note that the valuation assumptions and impact described here relate only to the 'baseline valuation' (see Section 3.1 for more information). The additional cost due to *Summerfield* is detailed in total in Section 11.

7.1 Introduction

We value lump sums in five segments:

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

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

7.2 Summary of results

Table 7.1 summarises the movements in our liability estimates for lump sum payments since the December 2020 valuation.

Table 7.1 – Valuation Results: Lump Sums

Dec20 Valuation	$m	$m	$m
Estimated Liab at Dec-20	313.4		
Projected Liab at Jun-21	315.2		
Jun-21 Valuation		AvE pmts	Release
Impact of experience/OSC - Movement in liab	3.0	(4.2)	1.2
Estimated Liab at Jun-21 (Dec-20 eco assumptions)	**318.1**		
Impact of change in eco assumptions	(2.3)		
Estimated Liab at Jun-21 (Jun-21 eco assumptions)	**315.9**		

The June 2021 liability shows an actuarial release of $1.2m since December 2020, reflecting an increase of $3.0m in the liability offset by $4.2m of lower claims payments. The remainder of this section deals with this impact, while the impact of the change in economic assumptions is discussed in Section 13.3.2.

7.3 Payment experience

Table 7.2 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 7.2 – Actual vs Expected Payments: Lump Sums

Accident	Payments in Six Months to Jun 21			
Period	Actual	Expected	Act - Exp	% Difference
	$m	$m	$m	
To 30 Jun 05	0.8	0.7	0.2	26%
2005/06 - 2014/15	3.9	3.2	0.7	22%
2015/16 - 2017/18	12.7	18.7	(6.0)	-32%
2018/19 - 2019/20	19.1	18.7	0.4	2%
2020/21	4.2	3.7	0.5	13%
Total	40.7	44.9	(4.2)	-9%

Payments were 9% lower than expected in the six months to 30 June 2021, with the difference arising from the 2015/16 to 2017/18 injury periods. We continue to observe slightly higher than expected payments for older claims which is a consequence of the ongoing stream of new WPI assessments coming through from projects related to transitional claims.

7.4 Valuation basis

7.4.1 Valuation basis for first paid lump sums

Our valuation basis adopts a combination of the chain ladder approach for more mature accident periods and a frequency based approach for more recent accident periods where there is less experience and there have been changes in the pattern of payments. Table 7.3 below compares the actual and expected number of First Paid lump sums paid in the six months to June 2021.

Table 7.3 – Actual vs Expected Numbers: First Paid Lump Sums

Accident	Number of Payments in Six Months to Jun 21			
Period	Actual	Expected	Act - Exp	% Difference
To 30 Jun 05	26	17	9	49%
2005/06 - 2014/15	83	71	12	18%
2015/16 - 2017/18	167	215	-48	-22%
2018/19 - 2019/20	279	274	5	2%
2020/21	0	4	-4	-100%
Total	555	581	-26	-4%

The number of First Paid lump sums in the last six months was 4% lower than expected. Experience for transitional claims was higher than expected with more claims continuing to emerge in the transitional claims project.

As was shown in Figure 4.1 the number of transitional claims starting the WPI assessment process has continued to be high and is yet to show any clear signs of running off. The transitional claims project continues to be extended off the back of high activity; contrary to our expectations given the finite number of claims in the transitional cohort and relatively long (and increasing) time period since the injuries occurred. Due to the lag from claims starting assessments up to finalisation of payments, this suggests there is still a significant number of transitional claims yet to be paid a first lump sum.

As a test of the reasonableness of our valuation basis for older accident years, Figure 7.1 below summarises a breakdown of open claims by their current status in the WPI assessment process (left-side bar) which is compared with the IBNR allowance for First Paid lump sums (right-side bar) for each accident year up to 2016.

Figure 7.1 – Comparison of Identified Potential Future Lump Sum Claims and Model IBNR Allowance (for accident periods up to June 2016)

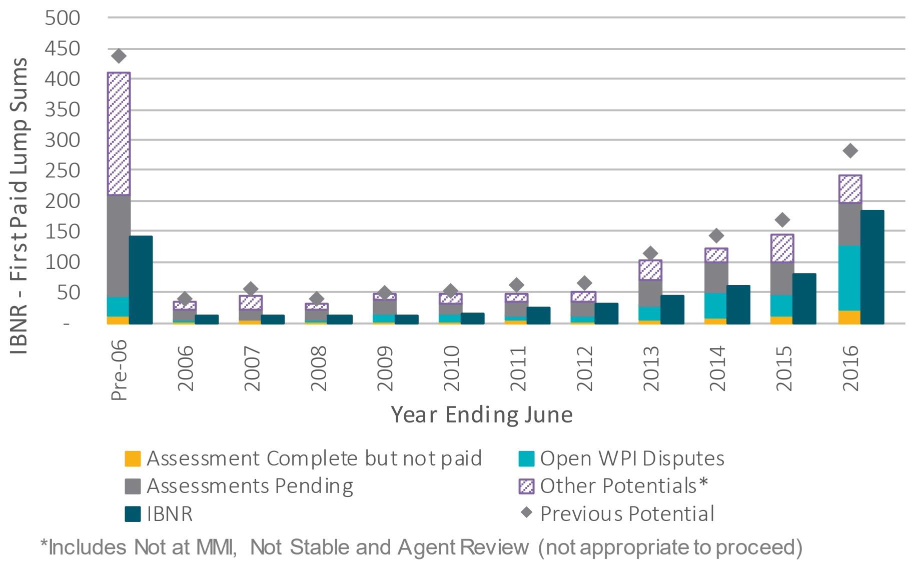


Figure 7.1 shows that:

- The number of identified potential future lump sum claims has not reduced much from six months ago despite the higher number of settlements in that time. This is due to lump sum settlements being largely offset by the inflow of new WPI applications as explained above.
- Pre-2006 accident periods have a high number of WPI assessments in progress. We understand this is linked to activity by ReturnToWorkSA to undertake WPI assessments for all 'prior claims' on workers currently having a WPI assessment. Many 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 has increased by around 5 claims per year consistent with the higher number of in-progress assessments and allows for around 30% of open disputes and 14% of pending assessments to be successful, consistent with the recent outcomes on transitional claims.
- For accident years 2006 to 2015 which are based on the chain ladder approach, there are a large number of claims with pending WPI assessments, open disputes or potential future assessments. We have increased our projections by around 5 claims per year on average to reflect the number of pending assessments and open disputes. Our basis allows for around 30% of open disputes and 30% of pending assessments to receive a lump sum.

Across all periods up to 2015, our selected basis allows for 800 future WPI assessments to commence in addition to the current ones in progress or under dispute. This translates to around a further 140 additional lump sum payments.

For the 2017 to 2019 accident years, we have reduced our IBNR allowance by around 10 claims per year reflecting the lower than expected level of claims starting a WPI assessment for these injury years, where the experience to date has been lower than earlier periods.

For the 2021 accident year, we have increased our projection of ultimates by 15 claims to achieve a similar proportion of Income Support claims receiving a lump sum payment as prior to 2021. This is a response to the higher numbers of claims receiving Income Support for recent injury periods as noted in Section 6.

Figure 7.2 shows the projected ultimate numbers of First Paid lump sums, split into paid and IBNR claims. The 2015 and 2016 years show the impact of the noticeable slowdown in lump sum payments, with the number paid up to the end of the fourth development year (the height of the aqua part of the bar) being much lower than occurred historically.

Figure 7.2 – Projected Ultimate Numbers of First Paid Lump Sums

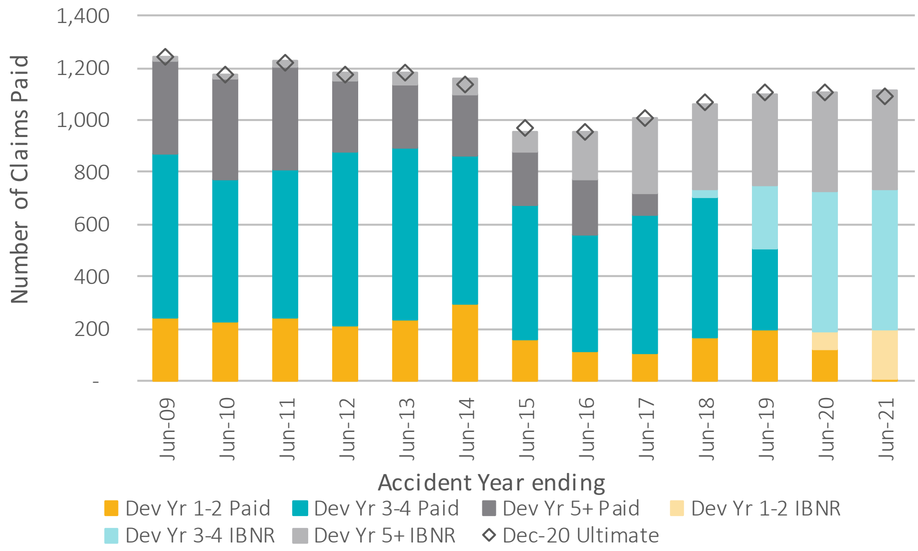
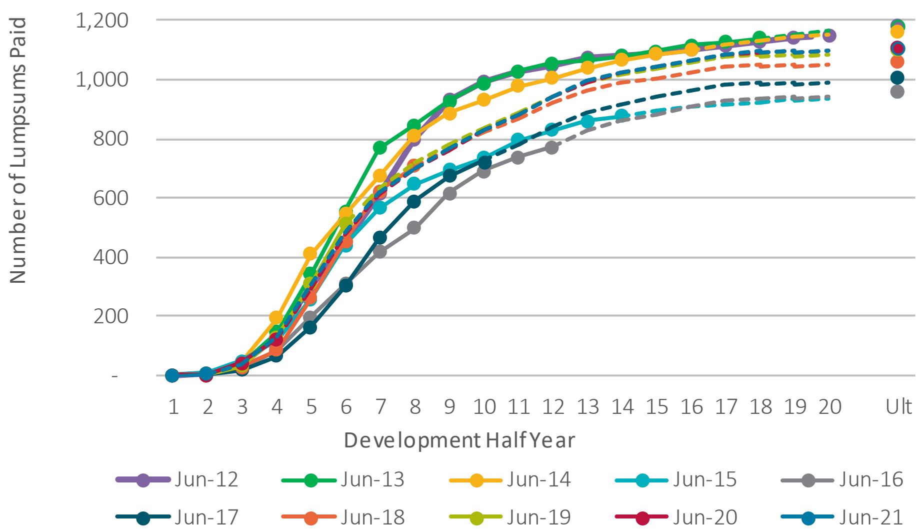


Figure 7.3 shows the cumulative number of First Paid lump sums by development year for accident years 2014 to 2021. The dotted line represents the projected development based on our selected payment pattern.

Figure 7.3 – First Paid Lump Sums Development

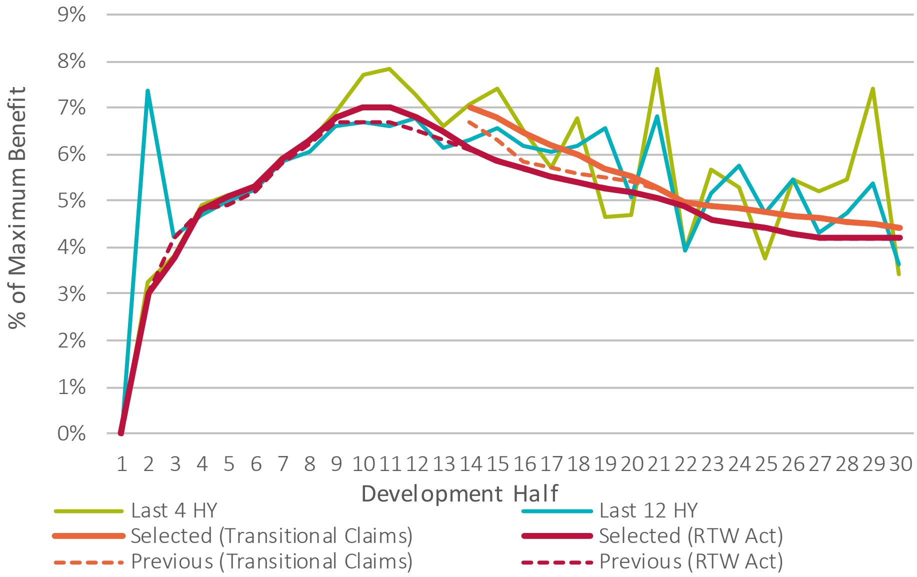


As Figure 7.3 shows, lump sum payments for all RTW Act accident years are currently sitting below the pre-reform experience (as demonstrated by the Jun-14 line). For 2018 and later years, the emerging experience suggests a faster payment pattern (more like the pre-reform experience) is occurring compared to 2016 and 2017. Our selected payment pattern up to development half-year 10 reflects this faster payment experience.

Figure 7.4 shows the average size of First Paid claims as a percentage of the maximum benefit available, by duration from injury.

Figure 7.4 – First Paid Lump Sums by Development Half-Year

(as a percentage of the maximum benefit)



We have increased our adopted size selections for both RTW Act and Transitional Claims at this valuation in response to the emerging experience – the most noticeable feature being higher lump sums between durations 9 to 13 half-years recently. At an overall level, the average First Paid lump sum is expected to be 5.6% of the prescribed maximum benefit, or around $27,700.

For completeness we note that at June 2019 ReturnToWorkSA implemented new assessor guidelines with the goal of improving consistency across WPI assessments. We have not observed any material change in the size of WPI assessments since the introduction of these guidelines and therefore have not built in any allowance for sizes to change in response to this in our basis.

7.4.2 Valuation basis for top up lump sums

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

The number of Top Up lump sum payments in the six months to 30 June 2021 was 62% lower than expectations. Average payments sizes were around 84% higher than expected, albeit on a low number of payments. We have held back the number of unpaid lump sums from the previous six month period and our basis allows for 54 future payments. While there is uncertainty around the success rate of the current top up applications and related disputes, the value is not large.

Details are included in Appendix G.

7.4.3 Valuation basis for hearing loss lump sums

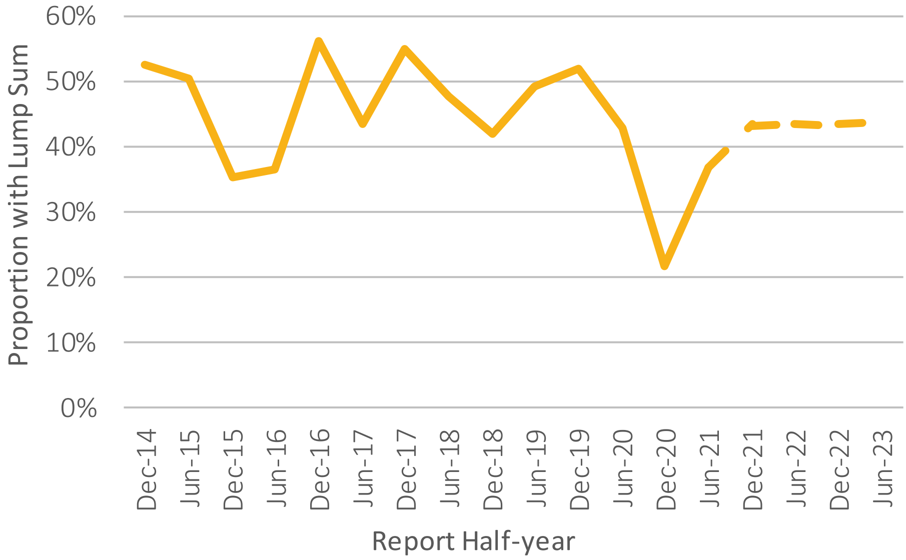
When estimating the number of future Hearing Loss lump sums, there is no differentiation between First Paid and Top Ups. In undertaking the Hearing Loss lump sum projection, we have been conscious of the recent increase in the number of reported hearing loss claims.

Hearing Loss lump sum payments over the last six months were around 3% higher than expected. However, we expect that if it were not for the slowdown in hearing loss assessments as ReturnToWorkSA implements its new approach to Hearing Loss claims acceptance, this number would have been much higher.

Figure 7.5 below shows the number of Hearing Loss lump sum payments as a proportion of overall hearing loss claim reports, as a test of whether the rapid growth in new claims has led to any apparent change in the utilisation of lump sums. Note the lump sum payments have been lagged by half a year to account for the delay between claim report and payment.

Figure 7.5 – Proportion of Hearing Loss Claims Getting a Lump Sum

(with a six month lag to allow for payment delays)



As this shows, the proportion of Hearing Loss claims receiving a lump sum was relatively stable at around 50% up to December 2019. The December 2020 half-year is then impacted by the disruptions in assessments due to COVID-19, and when combined with the rapid increase in Hearing Loss claims since 2019 the proportion of claims with a lump sum payment is lagging behind Hearing Loss claim reports, which has resulted in the proportion falling below 50%. Our selected basis implies that the patterns will over time return back to normal, with ultimate lump sums at around 53% of ultimate hearing loss claims for injury years 2018 and onwards.

Figure 7.6 shows the projected numbers of Hearing Loss lump sums by accident year. The tail of Hearing Loss IBNR claims is considerably longer than for First Paid lump sums, with claims still occurring many years after the end of exposure. As an indicator of how quickly the hearing loss claims experience has deteriorated recently, the Jun-20 year has already had more lump sums paid at the end of two years (the height of the orange column) than all preceding years had paid up to the end of four years development. At this valuation, we have increased the ultimate number of claims receiving a hearing loss lump sum in line with the increase in the number of hearing loss claims as noted in Section 5.1.

Figure 7.6 – Projected ultimate numbers of hearing loss lump sums

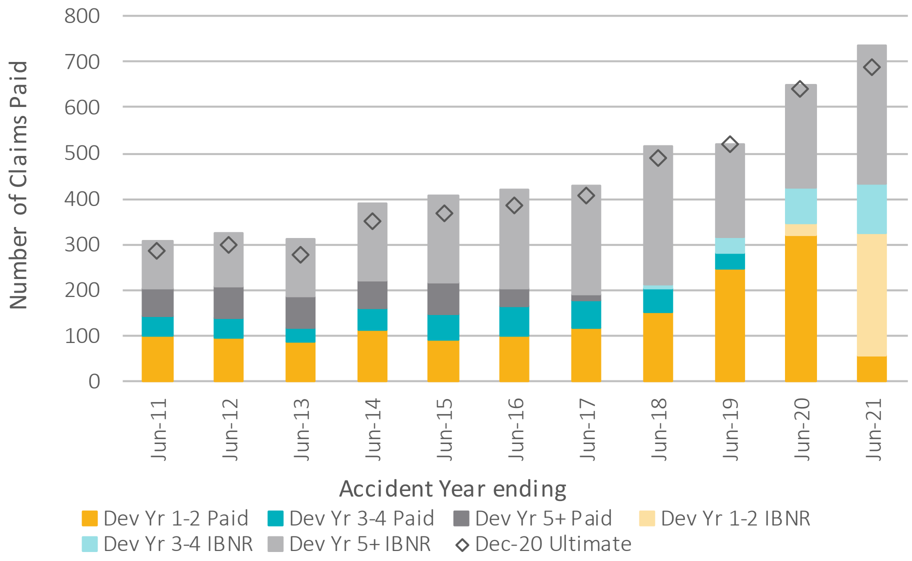
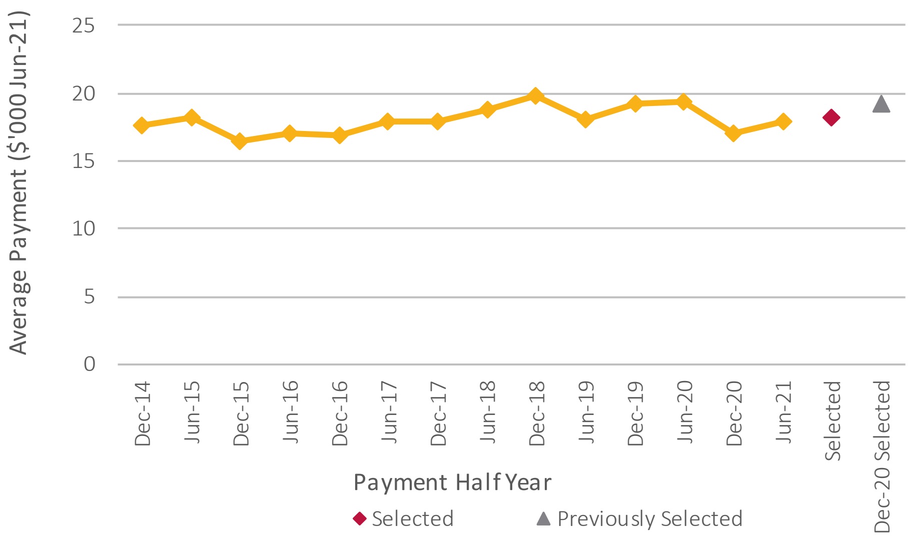


Figure 7.7 shows the overall average benefit paid for a Hearing Loss lump sum claim. The selected average Hearing Loss benefit at this valuation is around $18,200 per claim which represents a reduction of $1,100 from our previous valuation. The selected average size is consistent with the experience over the last two years and gives some weight to the lower average sizes observed over the last year.

Figure 7.7 – Average lump sum hearing loss payment ($Jun-21)



7.4.4 Valuation basis for death lump sums

Death (and funeral) lump sum payment numbers were in line with expectations although there were offsetting movements with more claims paid for the 2021 year offset by fewer payments for prior injury periods. Payments were 69% higher than expected due to a higher proportion of the paid claims being full death benefits rather than a funeral benefit. At this valuation we allowed the claim number experience to flow through to the basis and have sped up the payment pattern consistent with the emerging experience.

Figure 7.8 shows the projected numbers of Death lump sums by accident year.

Figure 7.8 – Projected ultimate numbers of death lump sums

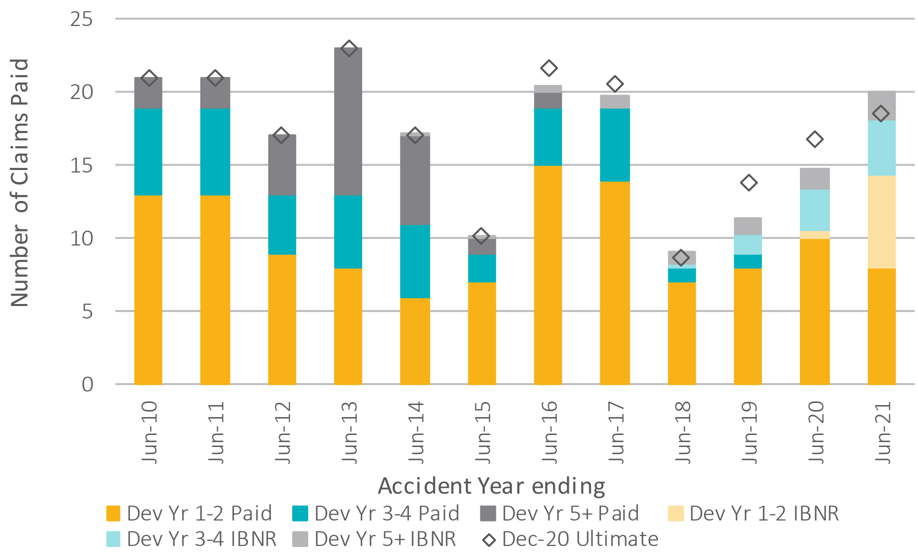
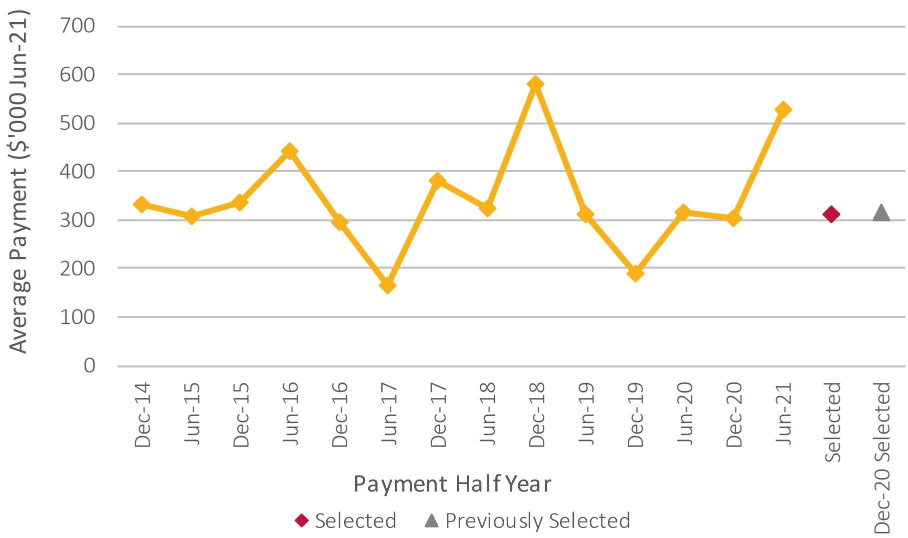


Figure 7.9 shows the average benefit paid to a Death lump sum claim, by payment half year.

Figure 7.9 – Average lump sum death payment ($Jun-21)



Our adopted size is unchanged at this valuation after adjusting for (CPI) inflation and is consistent with the long-term experience. We note there is considerable volatility in the shorter-term experience and therefore we have set our basis to a long-term horizon.

7.4.5 Valuation basis for economic loss lump sums

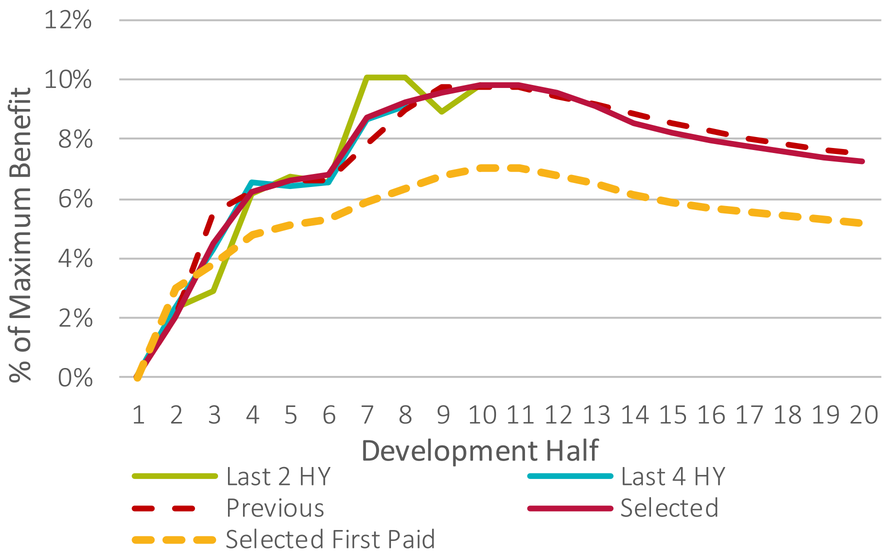
Economic Loss lump sums are paid to a worker for loss of future earning capacity. This benefit is only available under the RTW Act and is available to injuries from 1 July 2015. Our previous basis assumed every worker with a First Paid lump sum under the RTW Act would receive an Economic Loss lump sum.

At this valuation, after continuing to observe a growing cohort of claims with only First Paid lump sums but no Economic Loss lump sum paid, further work has identified that there are a group of claims only entitled to a non-economic loss benefit due to the hours worked factor of the Economic Loss lump sum formula being nil. This can occur for several reasons, including deductions for prior Economic Loss lump sums paid for the same worker or claims related to subsequent injuries. As a result, we have put through a reduction of around 5% in our selected ultimate number of Economic Loss lump sum payments. This is consistent with the current gap between the number of non-economic loss lump sums and economic loss lump sums paid to date for more developed injury periods.

Figure 7.10 shows the average size of Economic Loss lump sum payments as a percentage of the maximum benefit available – as more RTW Act claims experience emerges we are increasingly able to set these assumptions based on actual claims experience rather than assumed experience. The size selections up to development half 12 have been increased in light of the emerging experience. Beyond development half 12, we have reduced the ratio between Economic Loss lump sum sizes and First Paid lump sum sizes consistent with the experience at earlier durations. The selected average sizes for Economic Loss lump sums are higher than for First Paids due to a significantly higher payment scale for Economic Loss lump sums with 9% WPI and above. The overall impact is a slight strengthening of the basis.

Figure 7.10 – Economic loss lump sum size by development half-year

(as a percentage of maximum benefit)



7.5 Valuation results and actuarial release

Table 7.4 sets out the actuarial release resulting from our valuation of lump sum payments. The first column represents our projection from the December 2020 valuation.

Table 7.4 – Actuarial release for lump sums

Accident Period	Projected Liab at Jun 21 from Dec 20 Valuation	Jun 21 Estimate on Dec 20 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 21	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	3.5	5.7	2.2	0.2	(2.3)	-67%
2005/06 - 2014/15	19.5	23.9	4.4	0.7	(5.1)	-26%
2015/16 - 2017/18	75.1	74.0	(1.1)	(6.0)	7.1	9%
2018/19 - 2019/20	128.7	124.1	(4.6)	0.4	4.1	3%
2020/21	88.4	90.4	2.0	0.5	(2.5)	-3%
Total	315.2	318.1	3.0	(4.2)	1.2	0%

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

The $3.0m increase in projected liability is offset by payments being $4.2m less than expected in the six months, and results in an actuarial release of $1.2m. Because there are a range of different drivers for the overall result, there is considerable difference in the impacts by accident period.

Table 7.5 breaks down the actuarial release by source.

Table 7.5 – Components of Actuarial Release: Lump Sums

Release (strengthening) due to		
	$m	$m
AvE payments in six months		4.2
Changes to Valuation Basis		
Slower payment of claims	(5.8)	
First paid numbers	0.2	
First paid size and payment pattern	(3.1)	
Death numbers	2.3	
Hearing loss numbers	(6.7)	
Hearing loss size	2.0	
Top Up numbers	(0.4)	
Eco loss numbers	9.6	
Eco loss size	(1.0)	
Subtotal		(3.0)
Total		1.2

The components making a favourable contribution to the actuarial release are Economic Loss numbers ($9.6m), Death numbers ($2.3m) and smaller sizes for hearing loss ($2.0m). The lower than expected payments ($4.2m) have essentially been kept back in the reserves via an increase of $5.8m in the basis. Unfavourable contributions came from higher hearing loss claims (-$6.7m) and higher claim sizes on First Paid (-$3.1m).

8 Treatment and related costs – short term claims

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

We note that the valuation assumptions and impact described here relate only to the 'baseline valuation' (see Section 3.1 for more information). The additional cost due to *Summerfield* is detailed in total in Section 11.

8.1 Summary of results

Table 8.1 summarises the movements in our liability estimates for treatment and related costs since the December 2020 valuation.

Table 8.1 – Valuation results: treatment costs

	Medical	Hospital	Travel	Rehab	Physical Therapy	Other	Total Treatment
Dec-20 valuation	$m	$m	$m	$m	$m	$m	$m
Estimated liability at Dec-20	140.0	17.2	5.4	11.3	9.8	7.5	191.2
Projected liability at Jun-21	139.6	17.4	5.4	11.3	9.8	7.5	190.9
Jun-21 valuation							
Impact of experience/OSC - Movement in liab	11.3	(0.6)	(0.1)	0.3	(0.5)	(0.2)	10.2
Estimated liability at Jun-21 (Dec-20 eco assumptions)	**153.6**	**17.4**	**5.5**	**11.9**	**9.8**	**7.5**	**205.7**
Impact of change in eco assumptions	(2.0)	(0.1)	(0.0)	0.0	(0.0)	(0.0)	(2.1)
Estimated liability at Jun-21 (Jun-21 eco assumptions)	**151.6**	**17.4**	**5.5**	**11.9**	**9.8**	**7.5**	**203.6**
AvE payments - six months to Jun-21	(1.7)	(1.8)	(0.4)	(0.6)	(0.7)	(0.4)	(5.7)
Assumed payment delays	2.7	0.7	0.2	0.4	0.4	0.2	4.5
Actuarial release at Jun-21	(12.2)	1.8	0.3	(0.1)	0.7	0.4	(9.1)

The main movements from our December 2020 projection of the June 2021 liability are:

- An increase of $10.2m in the liability due to medical cost experience, notably the increasing cost of hearing aids caused by sharp increases in hearing loss claim numbers and the cost of medico-legal reports which is being driven by increased WPI and hearing loss assessment activity.
- Payments in the period were $5.7m below expected, though we have attributed around $4.5m of this to payment delays (see Section 4.4.6). This $4.5m has been shifted into the upcoming September 2021 quarter and does not constitute a release, though the remaining $1.2m still represents a release due to underlying payments being less than expected.
- Movements in economic assumptions reduce the treatment related liabilities by $2.1m.

The remainder of this section deals with the payment experience and valuation basis. The impact of the change in economic assumptions is discussed in Sections 12.1 and 12.2.

8.2 Valuation approach

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

- Active claim model (PPAC) – this is used for the valuation of Medical liabilities (excluding Aids and Appliances) for claims that are also receiving Income Support (IS) payments; for up to three years from the date of injury.

- Long term model (PPCI) – this is a quarterly model used for the valuation of all other treatment related liabilities, namely:
  - For Medical payments (excluding Aids and Appliances): to claims that are not receiving IS payments.
  - For claimants receiving Medical payments (excluding Aids and Appliances) alongside IS payments more than three years from the date of injury (generally due to long delay to first IS incapacity).
  - For other treatment related costs: this is used to value the total future cost of that entitlement, without differentiating between claims receiving Income Support or not.
  - Due to the increase in hearing loss claims in recent accident quarters, combined with the observation that hearing loss claims receive little to no medical and treatment benefits, the ultimate claim numbers used in these PPCI models has been changed to exclude hearing loss claims which would have distorted trends in payments per claim. There are two exceptions to this:
    - The Aids and Appliances PPCI model has now been split into a model for hearing loss claims (i.e. hearing aids) and non-hearing loss claims. This change was required because the payment pattern of hearing loss claims is markedly different to non-hearing loss claims; hearing loss claims tend to incur regular replacement and repair costs for hearing aids up to decades after the injury is reported, whereas the tail of payments to non-hearing loss claims is much shorter. With the growth in hearing loss claims this change was needed to ensure the costs were properly projected.
    - The Medical excluding Aids and Appliances model continues to include hearing loss claims in the ultimate claims used to calculate payments per claim. This is because hearing loss claims receive hearing loss and WPI assessments and the average amount paid to hearing loss claims is similar to other claims, so the upward trend in hearing loss claims does not distort the PPCIs in this model.
- 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 near zero, due to a combination of (1) claimants who do not commence their incapacity until sometime after their injury, and (2) payment delays.
  - "Transitional claims" – those that occurred prior to 30 June 2015: for these claims, the duration boundaries commenced on 1 July 2015 and so direct treatment payments will generally have ceased soon after 30 June 2018. The "Transitional claims" selections generally only apply for a small number of projection quarters before reverting to the "RTW Act claims" selections; the exception is certain benefit types where there is still a high level of payments related to dispute activity, in which cases we have extended the period where transitional selections are applied.

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

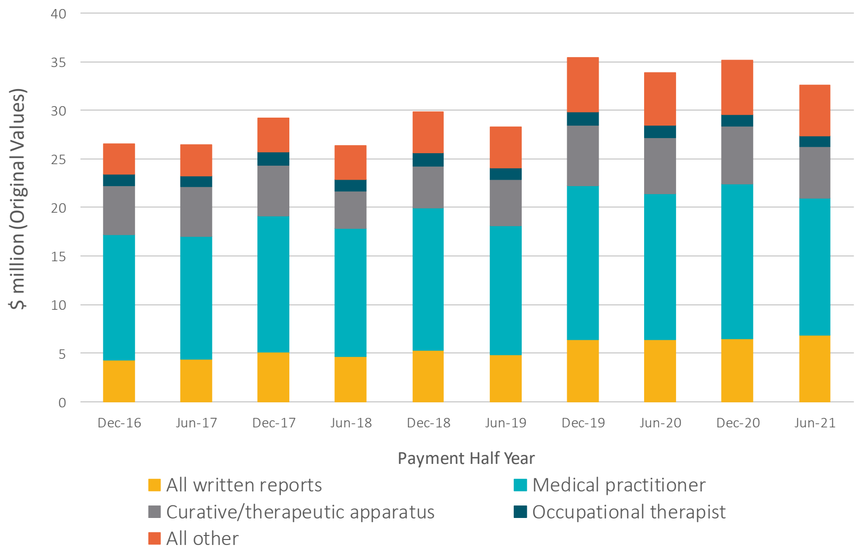
8.3 Medical

Medical payments include 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 8.7), including medico-legal costs.

8.3.1 Payments vs expectations

Figure 8.1 below shows medical payments by six-month period, split by the type of service.

Figure 8.1 – Medical half-yearly payments



After a period of relative stability up to June 2019, Medical payments then increased and have remained high for the past two years. The slight drop-off in the June 2021 half-year is partly attributed to lengthening delays in payment of medical invoices (see Section 4.4.6), rather than a reduction in the underlying Medical cost. The higher payments of late are evident across all the main types of services.

Table 8.2 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 8.2 – Actual vs expected payments: Medical

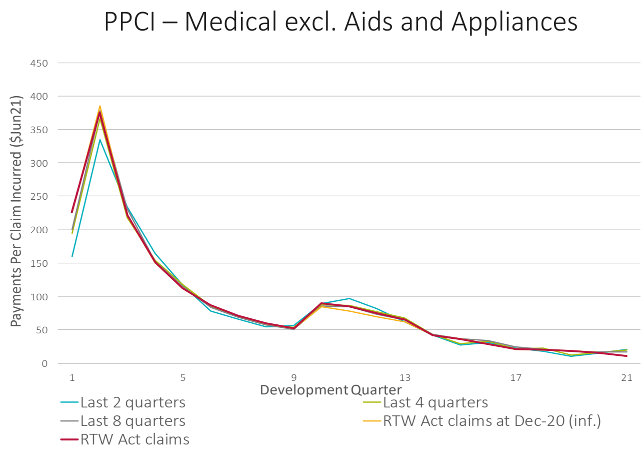
Accident Period	Payments in Six Months to Jun 21			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	1.3	1.3	0.1	7%
2005/06 - 2014/15	2.4	2.2	0.3	12%
2015/16 - 2017/18	3.0	2.9	0.1	2%
2018/19 - 2019/20	12.7	13.4	(0.7)	-5%
2020/21	13.1	14.6	(1.5)	-10%
Total	32.5	34.3	(1.7)	-5%

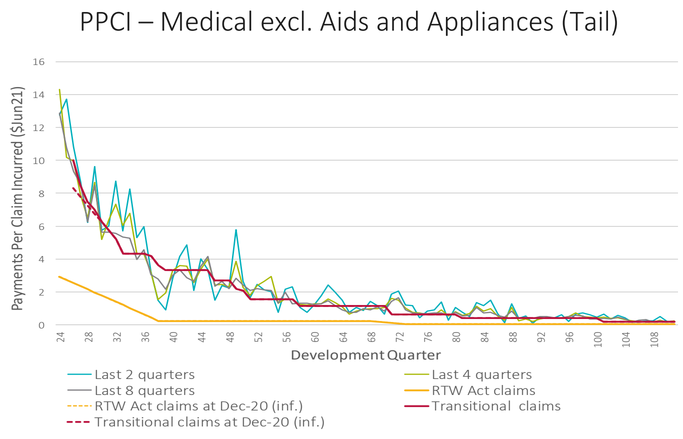
Overall, payments were 5% lower than expected in the six months to June 2021. Lower costs for recent accident periods are attributed to payment delays, while older accident periods higher than expected, mainly due to increasing medico-legal costs for transitional claims.

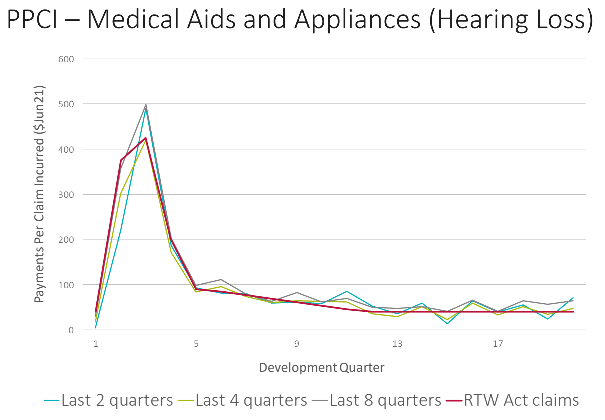
8.3.2 Valuation basis

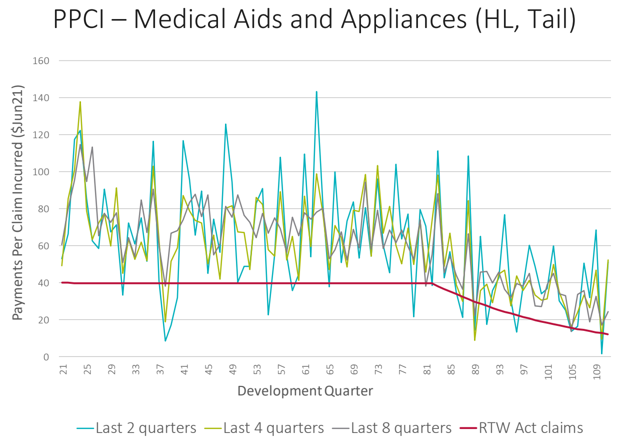
Figure 8.2 below shows the recent experience and selected basis for medical payments.

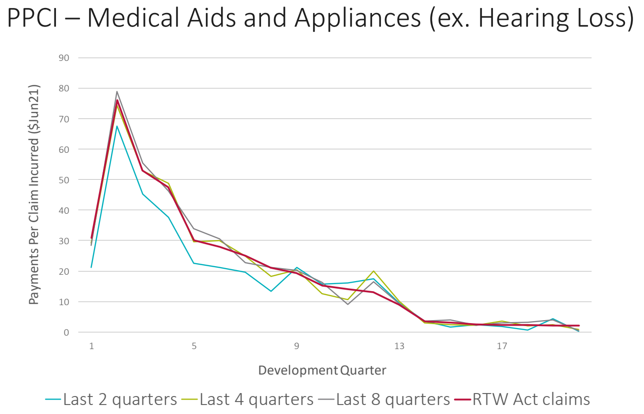
Figure 8.2 – Medical experience and selections

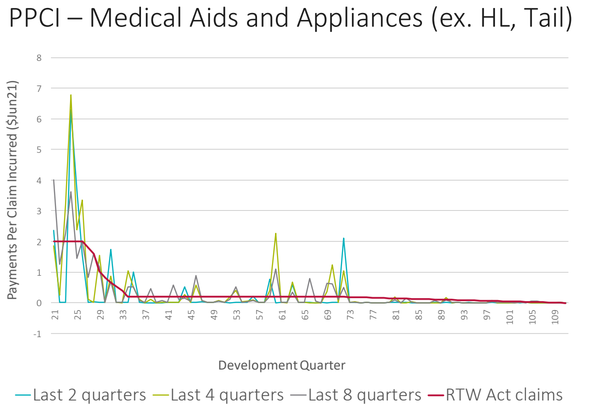




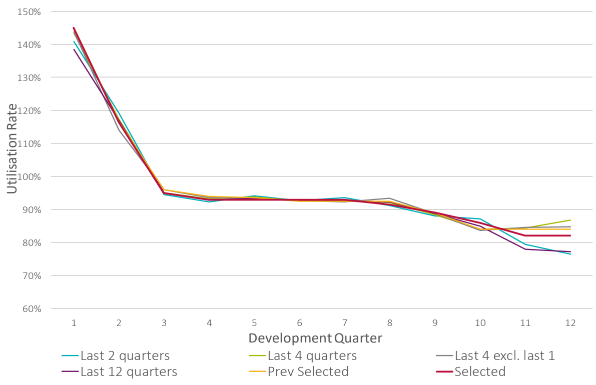




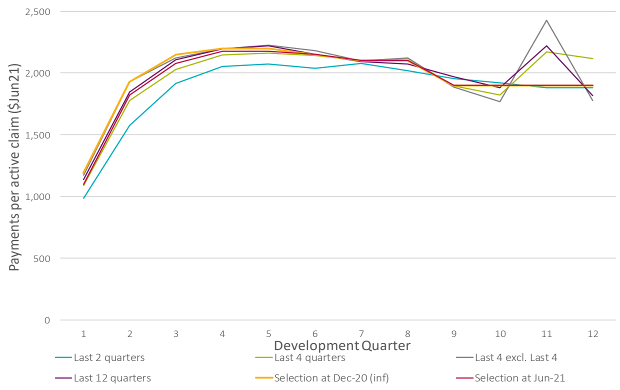




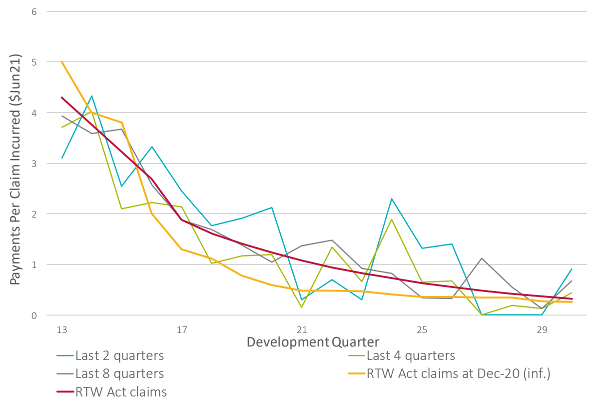
PPAC – Utilisation Rate



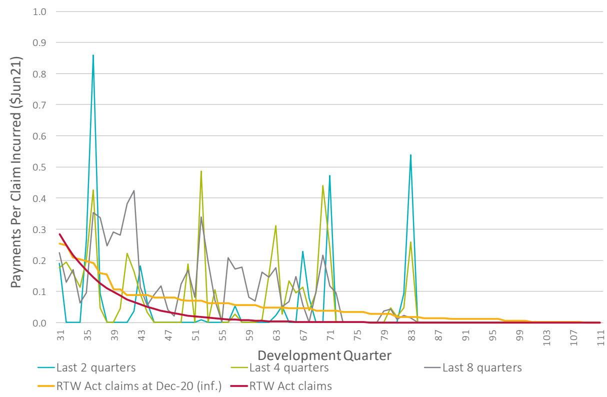
PPAC – Payments Per Active Claim



PPCI – Late Medical Payments with IS



PPCI – Late Medical Payments with IS (Tail)



Our comments on the experience and selected assumptions are:

- PPCI (Medical, excluding aids and appliances):
  - We have increased our basis for RTW Act accidents around development quarters 10-13 in response to recent experience, bringing our selections in line with the payment levels observed over the past 2 to 4 quarters.
  - Our ‘tail’ allowance has been increased in response to continued Transition Project activity, and associated written/medico-legal reports, to remain high over the next two years. The previous valuation basis included a similar allowance, also for two years, but starting from December 2020. This means we have pushed out the allowance, allowing for six further months of higher claims cost for transitional claims compared to the previous basis (essentially covering those claims who recently started the WPI assessment process, and allowing for a small tail of additional new assessments).
- PPCI (Medical aids and appliances)
  - We adopt the same PPCI pattern for transitional claims and RTW Act claims, but the selected patterns now vary for hearing loss claims and non-hearing loss claims.
  - For non-hearing loss claims, we have selected a PPCI pattern similar to the four-quarter average. The selections for the front-end costs of hearing loss claims are also based on the four-quarter average.
  - Hearing loss claims have a very long tail of payments, relating to the repair and replacement of hearing aids which can occur at regular intervals for the remainder of the claimant’s life. Our selected PPCI tail sits lower than the recent experience to account for

operational changes from RTWSA which have increased the rejection rate of hearing loss claims compared to prior years (up from around 25-30% historically to around 45% on recent claims lodged). As the claim numbers used in these PPCI models include rejected claims, all else equal an increase in the rejection rate reduces the PPCI (average size) of claims.

- PPAC:
  - > Medical payments have been below expected, though some of the reduction has been identified as payment delays. In response, we have tweaked our selected utilisation rates, to reflect what appears to be slightly lower utilisation, particularly around development quarters 3-4 and 11-12, noting that payment delays have affected the number of claims being identified as active (i.e. receiving payments) which makes it difficult to track underlying utilisation.
  - > PPACs decreased across most durations over the last six months, though again this is expected to be mostly (but not entirely) attributable to payment delays. We have only partly responded to this experience and reduced our PPACs for development quarters 1 to 5, reflecting the slightly better than expected front-end medical costs.
- PPCI (late medical payments for claimants also receiving IS):
  - > The dollar value of these medical payments is small; our PPCI selections are unchanged at this valuation and remain appropriate considering the emerging experience.

8.3.3 Valuation results and actuarial release

Table 8.3 sets out the actuarial release resulting from our valuation of medical payments. The first column represents our projection from the December 2020 valuation.

Table 8.3 – Actuarial release for Medical

Accident Period	Projected Liab at Jun 21 from Dec 20 Valuation	Jun 21 Estimate on Dec 20 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 21	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	12.3	9.3	(3.0)	0.1	2.9	24%
2005/06 - 2014/15	27.0	29.6	2.6	0.3	(2.9)	-11%
2015/16 - 2017/18	16.8	21.6	4.7	0.1	(4.8)	-29%
2018/19 - 2019/20	36.2	40.4	4.2	(0.7)	(3.5)	-10%
2020/21	47.3	52.7	5.4	(1.5)	(4.0)	-8%
Total	139.6	153.6	14.0	(1.7)	(12.2)	-9%

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

The $14.0m increase in the projected liability combined with actual payments being $1.7m lower than expected results in an actuarial strengthening of $12.2m.

Table 8.4 breaks down the actuarial release by source.

Table 8.4 – Components of actuarial release: Medical

Release (strengthening) due to		
	$m	$m
AvE payments in six months		1.7
Payment delays		(2.7)
Changes to valuation basis		
Ultimate claim numbers	(0.7)	
Medical actives projection	0.4	
Change to appliances model	(7.4)	
PPCI selections	(3.6)	
Subtotal		(11.3)
Total		(12.2)

The main drivers of change are:

- Underlying payments are assumed to be $1.0m higher than expected after factoring in payment delays, mostly the result of high medico-legal report costs for transitional claims.
- Changing the Aids and Appliances cost projections in response to the growth in hearing loss claims has added $7.4m to the liability.
- Increases to PPCI assumptions (i.e. higher costs per claim) for other medical payments, primarily the transitional claim allowance, have resulted in a $3.6 million increase in the liability.

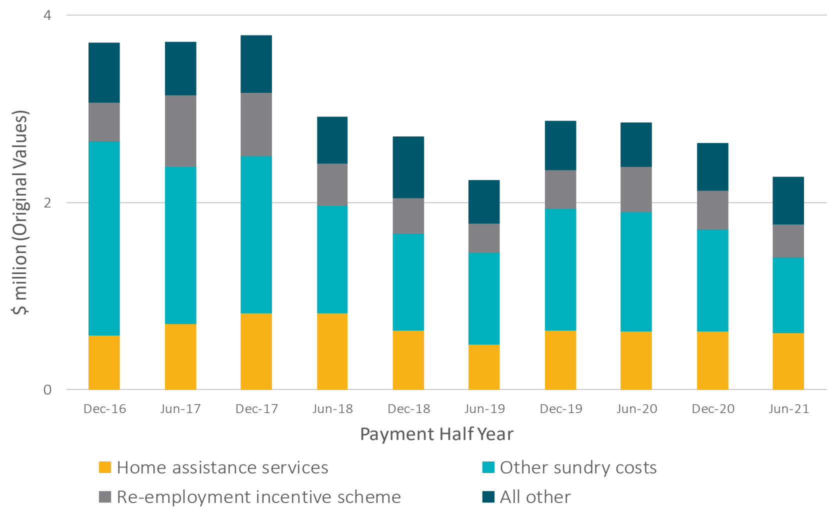
8.4 Other

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

8.4.1 Payments vs expectations

Figure 8.3 below shows 'other' payments by six-month period.

Figure 8.3 – Other half-yearly payments



After a period of high payments peaking with the June 2015 half-year, Other payments have been lower in the last four years following reductions in Other Sundry Costs and re-employment incentives. Over the last six months, payments continued to decrease from the higher level seen during FY20, due to an easing-off of 'Other Sundry Costs' and RISE payments, though it is expected that some of this drop-off is due to the increased payment delays also observed for Medical and other treatment costs.

Table 8.5 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 8.5 – Actual vs expected payments: Other

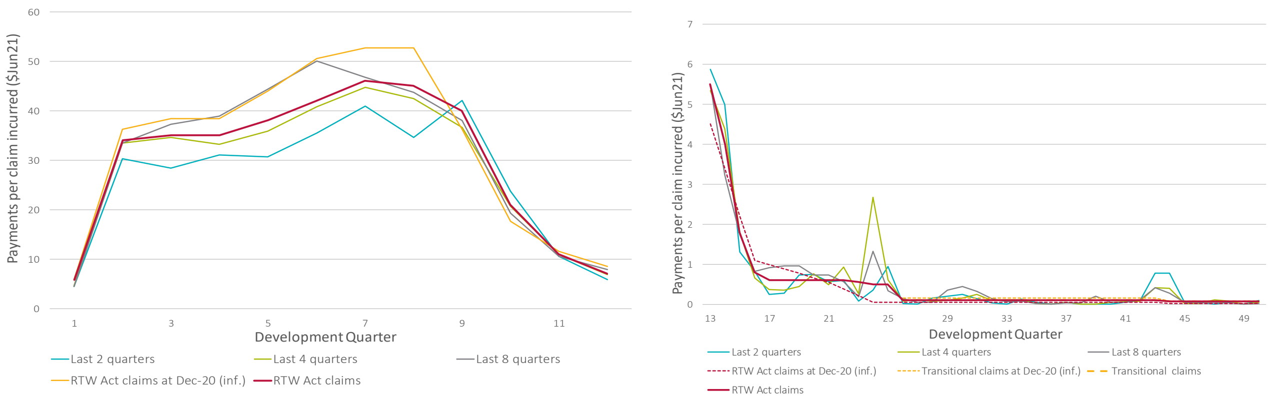
Accident Period	Payments in Six Months to Jun 21			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.0	0.0	58%
2015/16 - 2017/18	0.1	0.1	(0.0)	-2%
2018/19 - 2019/20	1.6	1.9	(0.3)	-18%
2020/21	0.5	0.6	(0.1)	-20%
Total	2.3	2.7	(0.4)	-16%

Overall payments were below expectations for all of the most recent three accident years, which is where the vast majority of Other payments occur.

8.4.2 Valuation basis

Figure 8.4 below shows the recent experience and selected basis for Other payments.

Figure 8.4 – PPCI experience and selections: Other



We have generally reduced our PPCI selections for development quarters 2 to 11, in response to the continued downward trend in payments observed over the past year. Past three years duration, we have flattened the PPCI pattern consistent with the experience over the last four to eight quarters. Our basis for transitional claims is now set to the same as the basis for RTW Act claims; with so few payments left outstanding at the point of development which transitional claims have reached, separate assumptions for each cohort no longer provide material improvements to the accuracy of the liability estimate.

8.4.3 Valuation results and actuarial release

Table 8.6 sets out the actuarial release resulting from our valuation of Other payments. The first column represents our projection from the December 2020 valuation.

Table 8.6 – Actuarial release for Other

Accident Period	Projected Liab at Jun 21 from Dec 20 Valuation	Jun 21 Estimate on Dec 20 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 21	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	
2005/06 - 2014/15	0.1	0.1	0.1	0.0	(0.1)	-144%
2015/16 - 2017/18	0.2	0.3	0.1	(0.0)	(0.1)	-55%
2018/19 - 2019/20	2.7	2.8	0.1	(0.3)	0.2	9%
2020/21	4.6	4.3	(0.3)	(0.1)	0.4	8%
Total	7.5	7.5	0.0	(0.4)	0.4	6%

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

Minimal change to the projected liability (after adding back in payment delays), combined with actual payments being $0.4 million lower than expected, results in an actuarial release of $0.4 million (6%).

Table 8.7 breaks down the actuarial release by source.

Table 8.7 – Components of actuarial release: Other

Release (strengthening) due to		
	$m	$m
AvE payments in six months		0.4
Payment delays		(0.2)
Changes to valuation basis		
Ultimate claim numbers	(0.0)	
PPCI selections	0.2	
Subtotal		0.2
Total		0.4

As this shows, the lower PPCI basis is the largest component of the actuarial release due to basis changes. Of the $0.4m lower than expected payments, around half is assumed to be due to payment delays and is held back in the liability, resulting in a net release of $0.2m due to lower than expected payments.

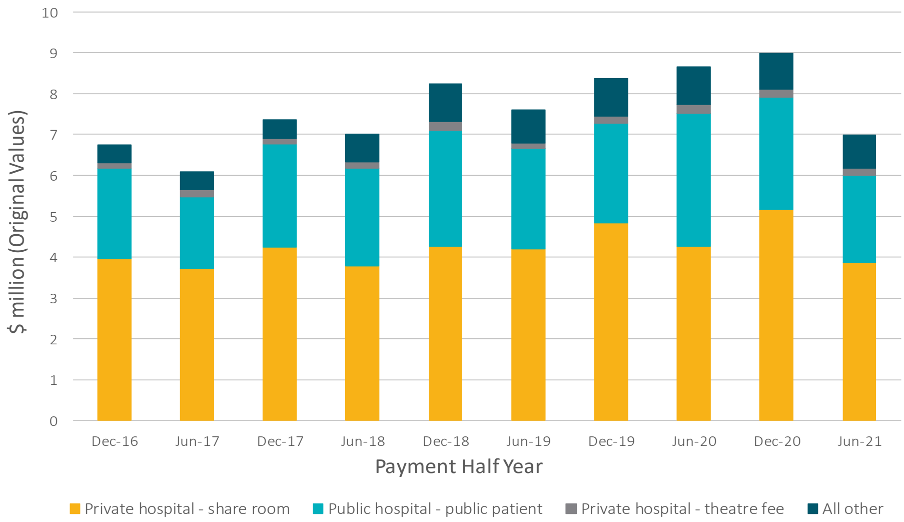
8.5 Hospital

Hospital payments include payments made to public and private hospitals.

8.5.1 Payments vs expectations

Figure 8.5 below shows hospital payments in each six-month period.

Figure 8.5 – Hospital half-yearly payments



While there appears to be some seasonality, Hospital payments have trended upwards since the end of 2016, with payments reaching $9m per half-year by December 2020. The trend appears in both private and public costs. The latest six-month period is partly impacted by payment delays and is not reflective of the underlying trend.

Table 8.8 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 8.8 - Actual vs expected payments: Hospital

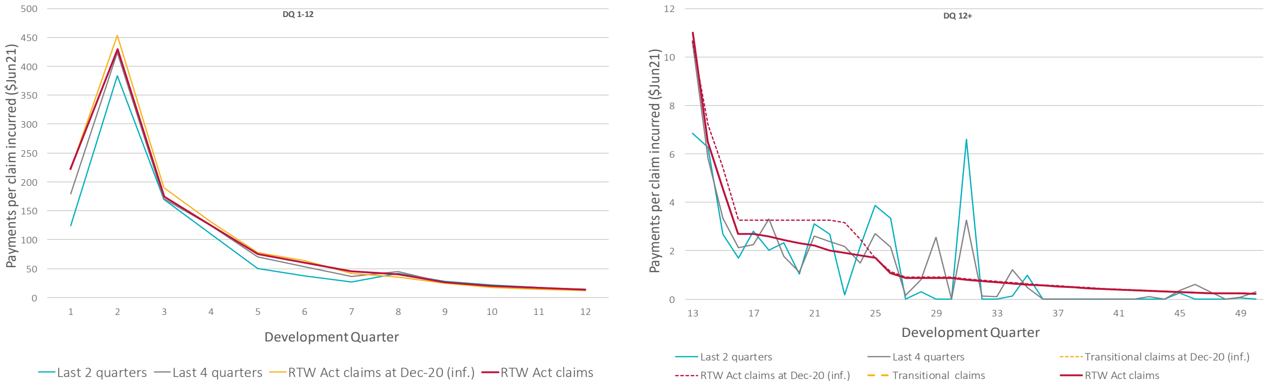
Accident	Payments in Six Months to Jun 21			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	(0.0)	-28%
2005/06 - 2014/15	0.2	0.1	0.0	5%
2015/16 - 2017/18	0.3	0.4	(0.1)	-27%
2018/19 - 2019/20	1.8	2.3	(0.5)	-22%
2020/21	4.8	6.0	(1.2)	-21%
Total	7.0	8.8	(1.8)	-21%

The bulk of hospital payments are made in the first two years after injuries occur. Over the past six months, payments have been much lower than expected, and while payment delays are thought to have played some role in this these do not seem significant enough to explain the full extent of the reduction. Given hospital billing practices can vary at times, we have only partially responded to the latest half-year experience.

8.5.2 Valuation basis

Figure 8.6 below shows the recent experience and selected basis for hospital payments.

Figure 8.6 – Hospital experience and selections



For the RTW Act PPCI, at this valuation we have put through slight reductions from development quarters 2 to 6, in response to the lower than expected payments over the past six months (even after accounting for payment delays), while slightly pushing up development quarters 7 to 13, again in line with the recent averages (two and four quarter averages).

Tail selections are reduced from the previous valuation for both RTW Act claims and transitional claims, which share the same selection, based on recent payment averages.

8.5.3 Valuation results and actuarial release

Table 8.9 sets out the actuarial release resulting from our valuation of hospital payments. The first column represents our projection from the December 2020 valuation.

Table 8.9 – Actuarial release for Hospital

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.5	0.5	0.0	(0.0)	0.0	0%
2005/06 - 2014/15	1.6	1.6	0.0	0.0	(0.0)	-1%
2015/16 - 2017/18	1.8	1.6	(0.2)	(0.1)	0.3	19%
2018/19 - 2019/20	4.4	4.4	0.0	(0.5)	0.5	11%
2020/21	9.1	9.4	0.3	(1.2)	1.0	11%
Total	17.4	17.4	0.1	(1.8)	1.8	10%

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

The $0.1m increase in the projected liability combined with actual payments being $1.8m lower than expected results in an actuarial release of $1.8m.

Table 8.10 breaks down the actuarial release by source.

Table 8.10 – Components of actuarial release: Hospital

Release (strengthening) due to		
	$m	$m
AvE payments in six months		1.8
Payment delays		(0.7)
Changes to valuation basis		
Ultimate claim numbers	(0.1)	
PPCI selections	0.7	
Subtotal		0.6
Total		1.8

The reductions in PPCI selections are the main basis change that contribute to the actuarial release. In addition, of the $1.8m lower than expected payments, around $0.7m has been held back in the liability, assumed to be the result of payment delays. This still results in a release of $1.1m due to lower than expected payments.

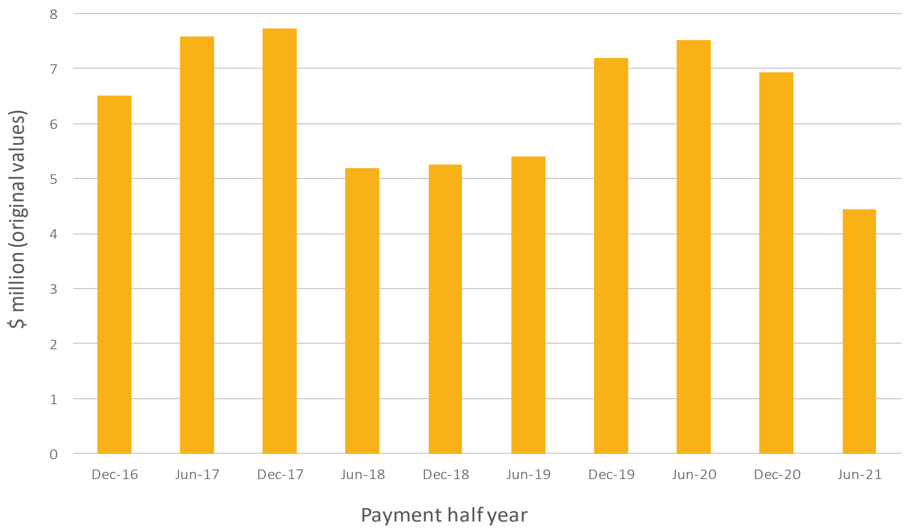
8.6 Rehabilitation

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

8.6.1 Payments vs expectations

Figure 8.7 below shows rehabilitation payments by six-month period.

Figure 8.7 – Rehabilitation half-yearly payments



Rehabilitation payments saw a sharp increase during FY20, after a period of lower payments between June 2018 and June 2019. Increased management oversight led to a decrease in the number of new rehabilitation referrals from late 2020, which is now clearly flowing through to lower claim payments.

Table 8.11 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 8.11 – Actual vs expected payments: Rehabilitation

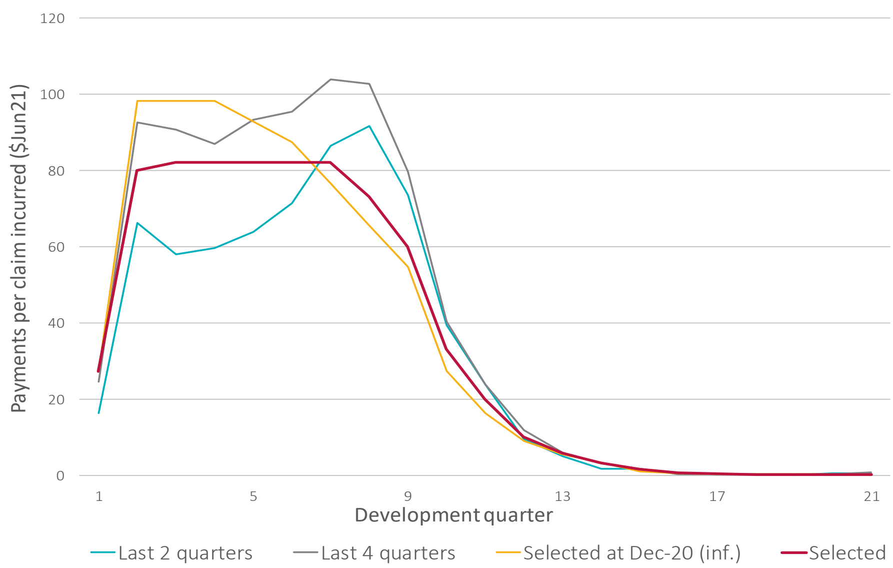
Accident Period	Payments in Six Months to Jun 21			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.0	(0.0)	-34%
2015/16 - 2017/18	0.1	0.1	(0.0)	-5%
2018/19 - 2019/20	3.2	3.1	0.1	3%
2020/21	1.1	1.8	(0.7)	-38%
Total	4.4	5.0	(0.6)	-11%

The difference between actual and expected payments all arises in the 2020/21 accident year following the management intervention described above. The difference may be overstated because of payment delays.

8.6.2 Valuation basis

Figure 8.8 below shows the recent experience and selected basis for rehabilitation payments.

Figure 8.8 – Rehabilitation experience and selections



We have reshaped our PPCI selections at this valuation, to better reflect emerging savings from stricter operational control of rehabilitation referrals, which we assume will continue. These controls have reduced costs on early duration claims, particularly for 2020/21 accident year, and so we have also allowed for the improvement to flow through to mid duration PPCIs at this valuation, essentially returning our expectations for future payments to the lower level seen in the June 2018 to June 2019 period. There is essentially no rehabilitation cost after the fourth development year.

8.6.3 Valuation results and actuarial release

Table 8.12 sets out the actuarial release resulting from our valuation of rehabilitation payments. The first column represents our projection from the December 2020 valuation.

Table 8.12 – Actuarial release for Rehabilitation

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	0.0	
2005/06 - 2014/15	0.0	0.0	0.0	(0.0)	0.0	23%
2015/16 - 2017/18	0.1	0.1	0.0	(0.0)	(0.0)	-1%
2018/19 - 2019/20	3.5	4.0	0.6	0.1	(0.7)	-20%
2020/21	7.7	7.8	0.1	(0.7)	0.6	8%
Total	11.3	11.9	0.6	(0.6)	(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 $0.6m increase in the projected liability, combined with actual payments being $0.6m below expectations results in minimal change to the liability.

Table 8.13 breaks down the actuarial release by source.

Table 8.13 – Components of actuarial release: Rehabilitation

Release (strengthening) due to		
	$m	$m
AvE payments in six months		0.6
Payment delays		(0.4)
Changes to valuation basis		
Ultimate claim numbers	(0.0)	
PPCI selections	(0.2)	
Subtotal		(0.3)
Total		(0.1)

The change in rehabilitation liabilities is small.

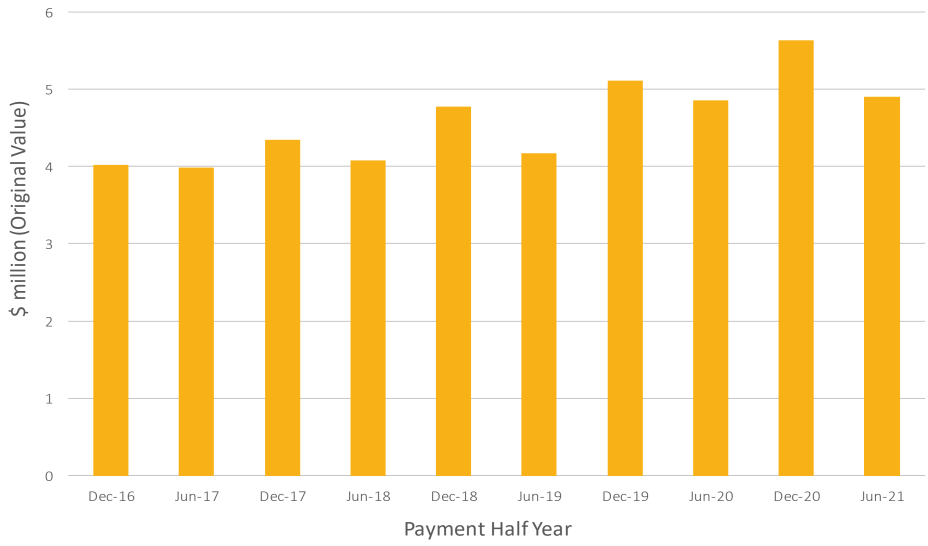
8.7 Physical Therapy

Physical Therapy payments are payments made to physiotherapists.

8.7.1 Payments vs expectations

Figure 8.9 below shows physical therapy payments by six-month period over the last five years.

Figure 8.9 – Physical Therapy half-yearly payments



Payments in the six months to December 2020 jumped up to over $5.5 million, following a period of relatively stable payments up to the end of June 2019. A fee increase of 13.6% above the standard inflation level in FY20 for 'subsequent consultations' was a primary factor in the steep increase in payments. Payments remained relatively high in the six months to June 2021, though payment delays mean the number ought to have been higher, likely in line with the six months to December 2020.

Table 8.14 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection. Overall, payments were lower than expected, due mainly to the payment delays experienced across all Medical and treatment benefit types.

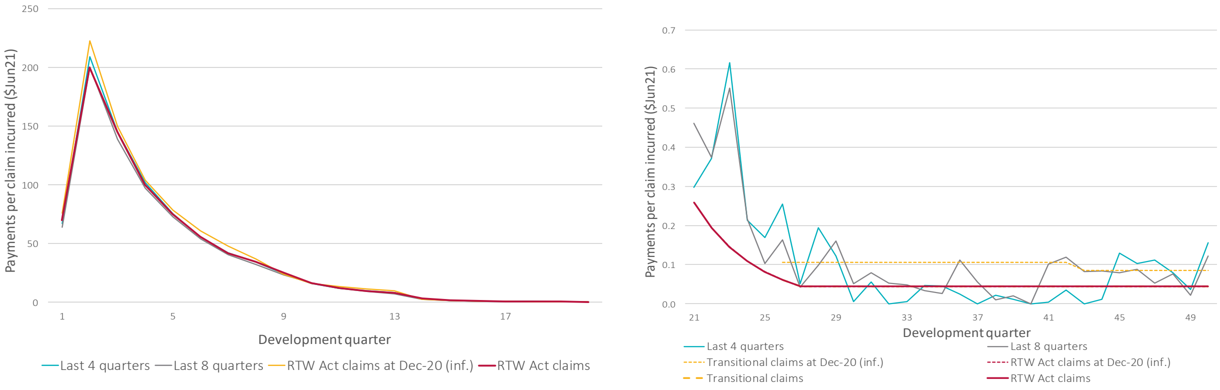
Table 8.14 – Actual vs expected payments: Physical Therapy

Accident	Payments in Six Months to Jun 21			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	13%
2005/06 - 2014/15	0.0	0.0	(0.0)	-25%
2015/16 - 2017/18	0.1	0.2	(0.0)	-15%
2018/19 - 2019/20	1.9	2.2	(0.3)	-13%
2020/21	2.8	3.2	(0.4)	-12%
Total	4.9	5.6	(0.7)	-13%

8.7.2 Valuation basis

Figure 8.10 below shows the recent experience and selected basis for physical therapy payments.

Figure 8.10 – Physical Therapy experience and selections



We have slightly reduced our PPCI selections for RTW Act claims at early durations (around development quarters 2-8) to align with the lower than expected payment experience over the past six months, after accounting for the presence of payment delays in the data.

We have adopted the same basis for both RTW Act and Transitional claims in the tail, given the immaterially low volume of payments coming through at that stage of development.

8.7.3 Valuation results and actuarial release

Table 8.15 sets out the actuarial strengthening resulting from our valuation of physical therapy payments. The first column represents our projection from the December 2020 valuation.

Table 8.15 – Actuarial release for Physical Therapy

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	-76%
2005/06 - 2014/15	0.2	0.3	0.0	(0.0)	(0.0)	-9%
2015/16 - 2017/18	0.2	0.2	0.0	(0.0)	0.0	3%
2018/19 - 2019/20	2.6	2.5	(0.0)	(0.3)	0.3	13%
2020/21	6.8	6.7	(0.1)	(0.4)	0.5	7%
Total	9.8	9.8	(0.0)	(0.7)	0.7	8%

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

More or less no change to the projected liability combines with payments that were $0.7 million below expected to result in an actuarial release of $0.7 million, or 8%.

Table 8.16 breaks down the actuarial strengthening by source.

Table 8.16 - Components of actuarial release: Physical Therapy

Release (strengthening) due to		
	$m	$m
AvE payments in six months		0.7
Payment delays		(0.4)
Changes to valuation basis		
Ultimate claim numbers	(0.0)	
PPCI selections	0.5	
Subtotal		0.5
Total		0.7

Of the $0.7m lower than expected payments, $0.4m has been assumed to be the result of payment delays, resulting in a net $0.2m actuarial release due to lower than expected payments. This combines with a $0.5m release due to reductions in the PPCI average size basis, for a total actuarial release of $0.7m.

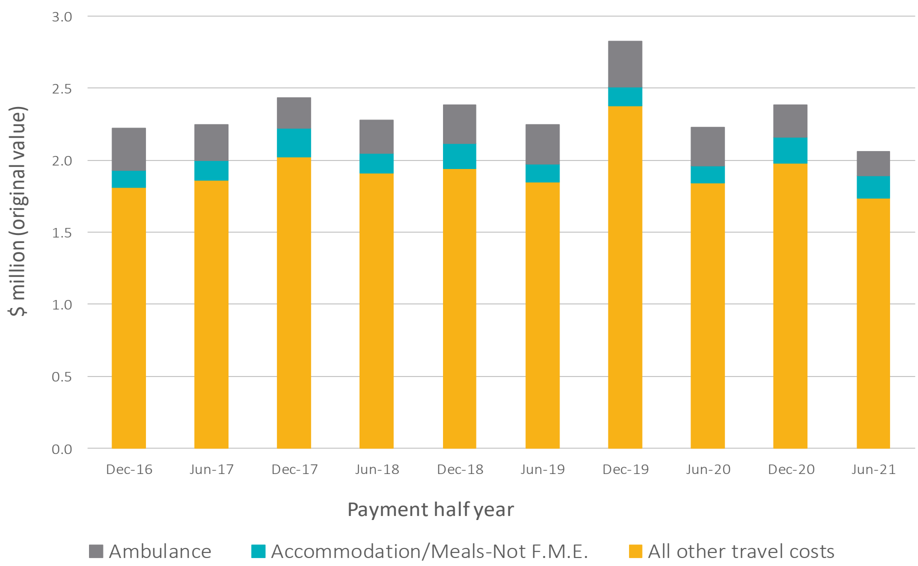
8.8 Travel

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

8.8.1 Payments vs expectations

Figure 8.11 below shows travel payments by six-month period over the last five years.

Figure 8.11 – Travel half-yearly payments



Following a spike in payments for the December 2019 half-year, payments appear to have reduced to prior levels. However, there may still be an element of COVID-19 impact in the payments over the past eighteen months, with various travel restrictions in place through large parts of this period, in addition to the known payment delays that are impacting payments in the June 2021 half-year.

Table 8.17 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 8.17 – Actual vs expected payments: Travel

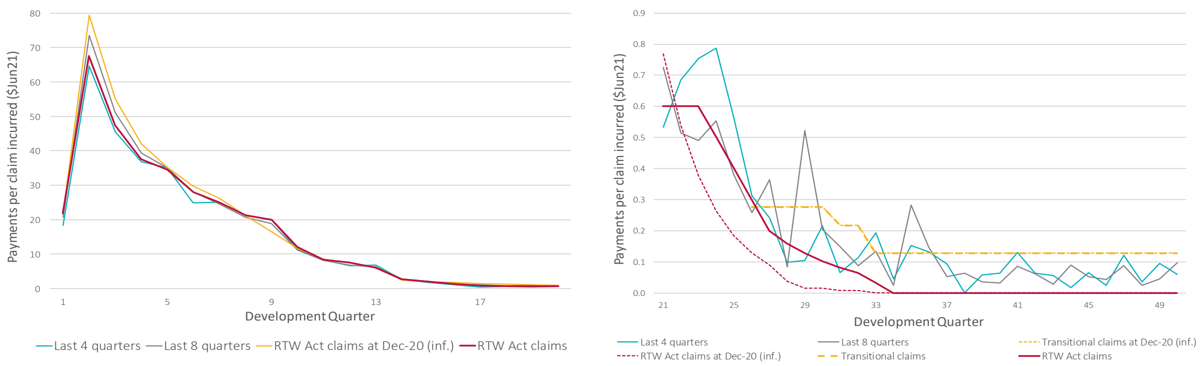
Accident Period	Payments in Six Months to Jun 21			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.0	(0.0)	-9%
2015/16 - 2017/18	0.1	0.1	(0.0)	-9%
2018/19 - 2019/20	1.1	1.1	(0.1)	-7%
2020/21	0.8	1.1	(0.3)	-28%
Total	2.1	2.5	(0.4)	-16%

Overall, payments in the last six months were $0.4 million lower than expected, arising from 2020/21 claims, likely to be impacted by payment delays.

8.8.2 Valuation basis

Figure 8.12 below shows the recent experience and selected basis for travel payments.

Figure 8.12 – Travel experience and selections



We have reduced our selected RTW Act PPCIs for development quarters 2 to 8 reflecting the lower than expected payments; this is a response to payments which are continuing to be lower than expected which is appearing more and more likely to be reflective of underlying cost rather than any short-term COVID-19 impacts.

PPCI assumptions out past development quarter 15 are increased for RTW Act claims, reflecting the emerging claims cost as RTW Act claims begin to reach later stages of development and incur higher costs in the tail than previously anticipated. We are also allowing for temporary additional costs for transitional claims for the next two years relating to the ongoing Transition Project (similar to other payment types already discussed).

8.8.3 Valuation results and actuarial release

Table 8.18 sets out the actuarial release resulting from our valuation of travel payments. The first column represents our projection from the December 2020 valuation.

Table 8.18 – Actuarial release for Travel

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	
2005/06 - 2014/15	0.0	0.1	0.0	(0.0)	(0.0)	-73%
2015/16 - 2017/18	0.2	0.2	0.0	(0.0)	(0.0)	-7%
2018/19 - 2019/20	1.8	1.9	0.1	(0.1)	(0.0)	-1%
2020/21	3.4	3.3	(0.0)	(0.3)	0.3	10%
Total	5.4	5.5	0.1	(0.4)	0.3	5%

[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 $0.4 million less than expected results in an actuarial release of $0.3 million at June 2021.

Table 8.19 breaks down the actuarial release by source.

Table 8.19 - Components of actuarial release: Travel

Release (strengthening) due to		
	$m	$m
AvE payments in six months		0.4
Payment delays		(0.2)
Changes to valuation basis		
Ultimate claim numbers	(0.0)	
PPCI selections	0.1	
Subtotal		0.1
Total		0.3

Of the $0.4m lower than expected payments in the six months to June 2021, around half is expected to be caught up in the next six months due to payment delays. This results in a net $0.2m release due to lower than expected payments over the past six months.

9 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.

We note that the valuation assumptions and impact described here relate only to the 'baseline valuation' (see Section 3.1 for more information). The additional cost due to *Summerfield* is detailed in total in Section 11.

9.1 Summary of results

Table 9.1 summarises the movements in our liability estimates for the remaining entitlement groups since the December 2020 valuation.

Table 9.1 – Valuation results: Other payment types

	Worker Legal	Corporation Legal	Invest-igation	Common Law	LOEC	Commu-tation	Recoveries	Total
Dec20 Valuation	$m	$m	$m	$m	$m	$m	$m	$m
Estimated Liab at Dec-20	49.0	37.1	2.4	1.4	0.7	2.2	(33.5)	59.2
Projected Liab at Jun-21	47.8	36.2	2.4	1.4	0.6	2.2	(33.3)	57.3
Jun-21 Valuation								
Impact of experience/OSC - Movement in liab	3.9	4.0	(0.2)	0.0	0.0	(0.0)	(2.9)	4.8
Estimated Liab at Jun-21 (Dec-20 eco assumptions)	**51.6**	**40.2**	**2.2**	**1.4**	**0.6**	**2.2**	**(36.1)**	**62.1**
Impact of change in eco assumptions	(0.2)	0.2	(0.0)	(0.0)	(0.0)	(0.0)	0.2	0.0
Estimated Liab at Jun-21 (Jun-21 eco assumptions)	**51.4**	**40.4**	**2.2**	**1.4**	**0.6**	**2.2**	**(36.0)**	**62.1**
AvE Payments - six months to Jun-21	0.8	(0.2)	(0.1)	(0.1)	0.0	(0.2)	(1.7)	(1.4)
Actuarial Release at Jun-21	(4.7)	(3.8)	0.2	0.1	(0.0)	0.2	4.6	(3.4)

There is material actuarial strengthening in both Worker Legal and Corporation legal. The recoveries component in the valuation increased, resulting in a favourable movement. Other changes were minor.

9.2 Worker Legal

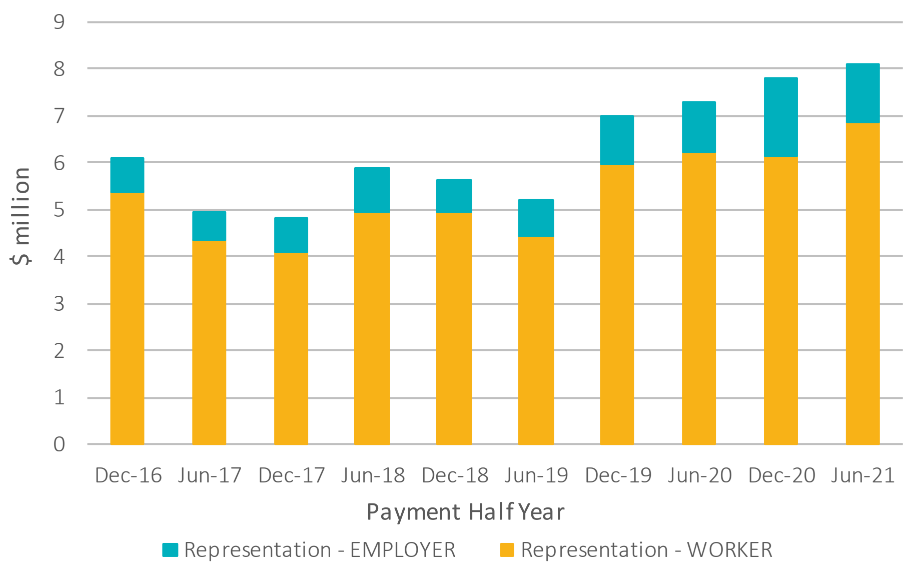
Our valuation of legal costs separately models legal fees paid to ReturnToWorkSA's contracted legal advisers (Minter Ellison and Sparke Helmore), which we call 'Corporation Legal', and legal fees paid to workers' representatives and employers, which we call 'Worker Legal'. This section describes the Worker Legal results, with Section 9.3 discussing ReturnToWorkSA's legal costs.

Disputes are the main driver of expenditure for both worker and Corporation Legal fees, and were discussed in Section 4.4.3. 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.

9.2.1 Experience

Figure 9.1 below shows Worker Legal payments in each six month period over the last five years.

Figure 9.1 – Worker Legal Half Yearly Payments



Payments have increased significantly in the last two years. As shown in Section 4.4.3, there remains an increasingly large number of open disputes in the scheme.

Disputes being lodged for RTW Act claims have increased to nearly 250 per month over the last six months, in part due to lump sum disputes from increased numbers of WPI assessments. This is now above the longer-term average level of around 200 disputes per month for pre-RTW Act periods. As also noted in Section 4.4.3, recently finalised disputes are also progressing to higher stages of the dispute resolution process than they previously did, which translates to higher legal costs as the fees paid to lawyers increase significantly as you move through the dispute process.

Table 9.2 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 9.2 – Actual vs expected payments: Worker Legal

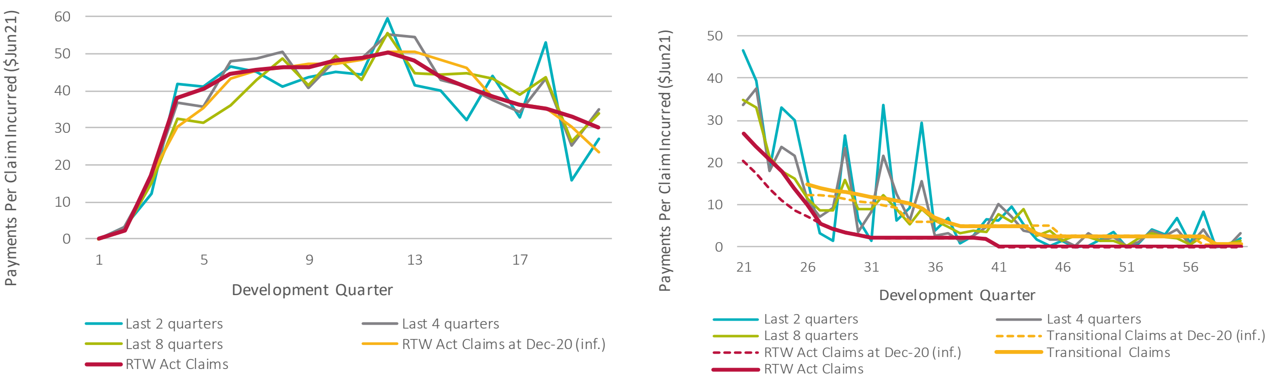
Accident	Payments in Six Months to Jun 21			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.2	0.1	0.1	81%
2005/06 - 2014/15	2.1	1.6	0.5	29%
2015/16 - 2017/18	2.9	2.7	0.2	8%
2018/19 - 2019/20	2.7	2.6	0.1	3%
2020/21	0.3	0.2	0.0	7%
Total	8.1	7.3	0.8	12%

Overall, payments in the six months to June 2021 were higher than expected by 12%, spread across all injury periods.

9.2.2 Valuation basis

A PPCI model is used to value Worker Legal fees. Figure 9.2 below shows the recent experience and selected basis for Worker Legal payments.

Figure 9.2 – Worker Legal experience and selections



We have reshaped our valuation basis for RTW Act claims between development quarters 4 to 15 in light of the faster payments in the emerging experience. Between development quarters 19 to 26, we are still seeing a high level of payments emerge in the experience and have increased our basis as a result. This represents the higher number of disputes being lodged as well as disputes progressing further through the disputation process.

For transitional claims, we have increased our valuation basis by $0.3m. This is the net impact of expected higher payments in the tail to reflect the number of currently open disputes and their continued progression through to the later stages of the dispute resolution process. Our revised valuation estimate of around $10.8m (discounted) for transitional Worker Legal costs allows for some further progression of currently open disputes, along with around 300 further new disputes to be lodged (at a lower cost) before the transitional cohort is fully run off. As shown in Figure 4.1, there have continued to be around 30 new transitional claim disputes per month over the last half-year, so our allowance for future new disputes equates to around 10 months' worth at the current monthly run rate.

9.2.3 Valuation results and actuarial release

Table 9.3 sets out the actuarial release resulting from our valuation of Worker Legal payments. The first column represents our projection from the December 2020 valuation.

Table 9.3 – Actuarial release for Worker Legal

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.5	0.5	0.0	0.1	(0.1)	-13%
2005/06 - 2014/15	9.9	10.2	0.4	0.5	(0.9)	-9%
2015/16 - 2017/18	7.7	9.2	1.5	0.2	(1.7)	-22%
2018/19 - 2019/20	17.7	18.7	1.0	0.1	(1.1)	-6%
2020/21	12.0	12.9	0.9	0.0	(0.9)	-8%
Total	47.8	51.6	3.9	0.8	(4.7)	-10%

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

The actuarial strengthening of $4.7m is due to liability increases of $3.9m combined with actual payments being $0.8m higher than expected.

Table 9.4 breaks down the actuarial strengthening by source.

Table 9.4 – Components of actuarial release: Worker Legal

Release (strengthening) due to		
	$m	$m
AvE payments in six months		(0.8)
Changes to Valuation Basis		
Ultimate claims	(0.3)	
PPCI assumptions	(3.5)	
Subtotal		(3.9)
Total		(4.7)

9.3 Corporation Legal

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

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

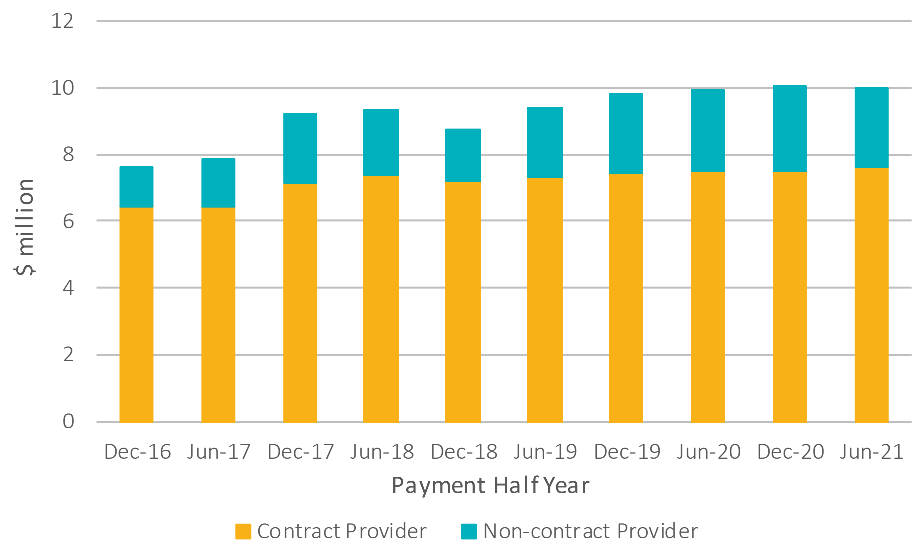
A performance fee is also payable at the end of each contract half-year based on the achievement of certain performance outcomes. This fee is unchanged for the FY21 contract.

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

9.3.1 Experience

Figure 9.3 below shows Corporation Legal payments in each six month period over the last five years.

Figure 9.3 – Corporation Legal half yearly payments



Corporation Legal expenditure in the six months to June 2021 was similar to the 2020 calendar year and remains higher than previous periods due to higher "non-contract" fees. The high amount of "non-contract" fees reflects high recoveries activity and a higher number of matters in the Supreme Court as mentioned in Section 4.4.3.

Table 9.5 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 9.5 – Actual vs expected payments: Corporation Legal

Accident Period	Payments in Six Months to Jun 21			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
Total	10.0	10.2	(0.2)	-2%

Overall, actual payments were $0.2m (2%) lower than expected. A breakdown by accident period is not possible as Corporation Legal payments are not allocated to individual claims.

9.3.2 Valuation basis

Under the current contract, a fixed amount is paid to each legal provider each month regardless of the number of non-complex matters referred. Table 9.6 below summarises the payments applicable under the current contract.

Table 9.6 – Corporation Legal contract components

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

To project the future costs of Corporation Legal we have:

- Adopted the fixed monthly fees payable to each provider under the contract
  - > The fixed fee per month has increased for the December 2021 half-year in line with indexation. Beyond the current contract, the fees are estimated to remain at a similar level reflecting the relative stability in the contract costs to date despite varying levels of disputes in the scheme.
- Estimated the number of complex matters that will be referred each year for the duration of the contract and multiplied this by the relevant fees as specified in the contract terms.
  - > We have made an allowance for payments of $142,000 per half-year due to the high number of complex matters currently open.
- 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 $1.2m per half year is unchanged from our previous valuation and reflects the high volume of complex cases under the RTW Act.
  - > Our previous basis included an additional allowance of $1.5m per half-year until March 2022 for resolving Supreme Court matters. At this valuation, we have extended this allowance to December 2024 with the additional cost gradually running down by $0.25m per half-year starting from July 2022. This arises from the current delays in resolving

Supreme Court matters in addition to the potential future legal costs associated with resolving *Summerfield* and related legal decisions.

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. We also assume that as transition claims eventually run-off, dispute lodgements will occur slightly earlier due to the shorter duration of claims under the RTW Act.

9.3.3 Valuation results and actuarial release

Table 9.7 sets out the actuarial release resulting from our valuation of Corporation Legal payments. The first column represents our projection from the December 2020 valuation.

Table 9.7 - Actuarial release for Corporation Legal

Accident Period	Projected Liab at Jun 21 from Dec 20 Valuation	Jun 21 Estimate on Dec 20 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 mths to Jun 21	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
Total	36.2	40.2	4.0	(0.2)	(3.8)	-10%

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

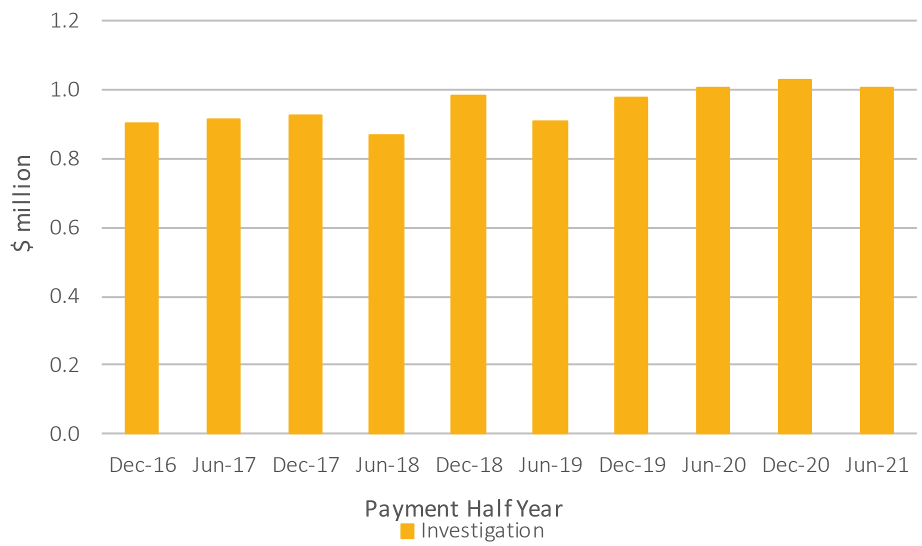
The $4.0m increase in the projected liability partly offset by actual payments being $0.2m lower than expected results in an actuarial strengthening of $3.8m.

9.4 Investigation costs

9.4.1 Experience

Figure 9.4 below shows investigation payments in each six-month period over the last five years.

Figure 9.4 – Investigation half yearly payments



Investigation spending in the six months to June 2021 was just over $1m, which is similar to the previous year.

Table 9.8 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 9.8 – Actual vs expected payments: Investigation

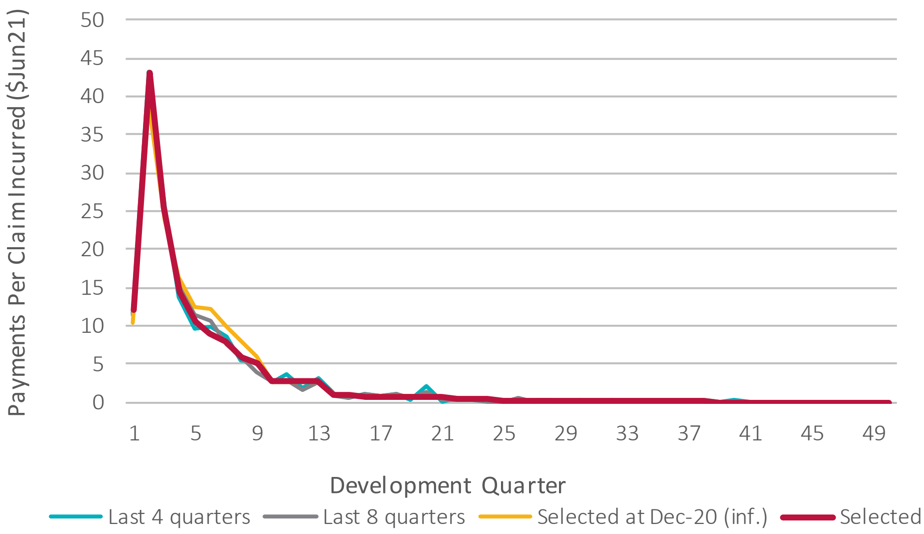
Accident Period	Payments in Six Months to Jun 21 Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.0	(0.0)	-8%
2015/16 - 2017/18	0.1	0.1	0.0	4%
2018/19 - 2019/20	0.3	0.4	(0.1)	-31%
2020/21	0.6	0.5	0.1	14%
Total	1.0	1.1	(0.1)	-5%

Overall, actual payments were slightly lower than expectations.

9.4.2 Valuation basis

A PPCI model is used to value investigation payments. Figure 9.5 below shows the recent experience and selected basis.

Figure 9.5 – PPCI experience and selections: Investigation



We have reshaped the adopted PPCIs out to development quarter 9 at this valuation, resulting in a slight reduction in the basis. We have not allowed for a different PPCI pattern for transitional claims up to 30 June 2015 on materiality grounds.

9.4.3 Valuation results and actuarial release

Table 9.9 sets out the actuarial strengthening resulting from our valuation of investigation payments. The first column represents our projection from the December 2020 valuation.

Table 9.9 - Actuarial release for Investigation

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	0.0	(0.0)	
2005/06 - 2014/15	0.1	0.1	0.0	(0.0)	(0.0)	-26%
2015/16 - 2017/18	0.2	0.2	0.0	0.0	(0.0)	-4%
2018/19 - 2019/20	0.8	0.7	(0.1)	(0.1)	0.2	24%
2020/21	1.3	1.2	(0.1)	0.1	0.1	4%
Total	2.4	2.2	(0.2)	(0.1)	0.2	9%

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

The $0.2m decrease in the projected liability combined with payments being $0.1m less than expected results in an actuarial release of $0.2m.

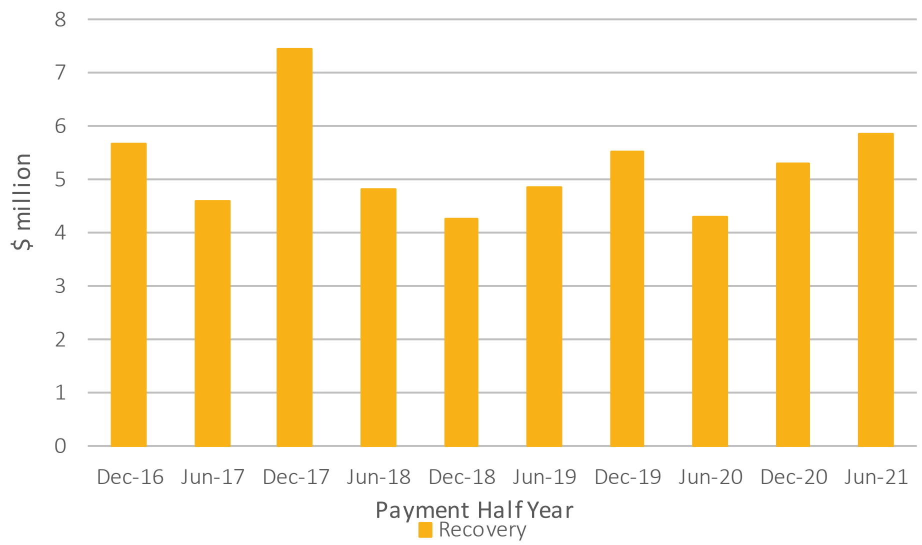
9.5 Recoveries

Recoveries can be made by ReturnToWorkSA from overpayments to workers, from the Motor Accident 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.

9.5.1 Experience

Figure 9.6 below shows recovery receipts (i.e. payments received by ReturnToWorkSA) in each six-month period over the last five years.

Figure 9.6 – Recovery half yearly payments received



Recovery payments in the six months to June 2021 were at the high end of payment experience over the last three years.

Table 9.10 compares the payments in the six months to 30 June 2021 with the expected payments from our December 2020 valuation projection.

Table 9.10 – Actual vs expected payments: Recoveries

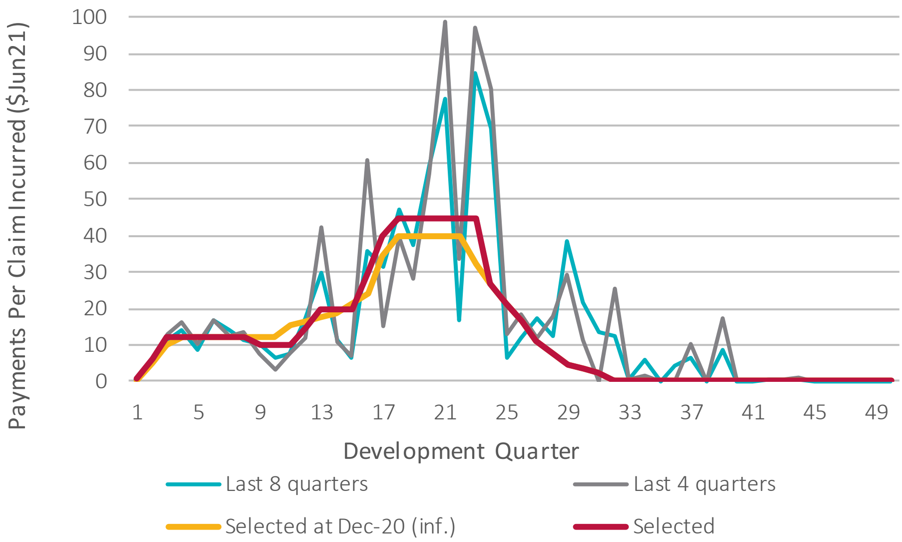
Accident Period	Payments in Six Months to Jun 21			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	(0.0)	0.0	(0.0)	n/a
2005/06 - 2014/15	(1.1)	(0.9)	(0.1)	11%
2015/16 - 2017/18	(4.1)	(2.4)	(1.7)	72%
2018/19 - 2019/20	(0.5)	(0.7)	0.2	-27%
2020/21	(0.2)	(0.1)	(0.1)	69%
Total	(5.9)	(4.1)	(1.7)	42%

Actual recovery payments were $1.7m higher than expected, due to some large public liability recoveries from the 2015/16 accident year.

9.5.2 Valuation basis

A PPCI model is used for recovery payments. Figure 9.7 below shows the recent experience and selected basis.

Figure 9.7 – PPCI experience and selections: Recoveries



Our selected recovery PPCI assumptions have been increased at this valuation and gives some weight to the recent favourable experience. As recovery payments tend to be volatile, we have taken a longer-term view when selecting our basis. In addition, our expectation is for lower recoverability of costs under the RTW Act (where gross payments are lower), and following CTP reforms in 2014. Therefore, our selection does not fully reflect the recent experience at longer durations, where larger than expected recoveries have mostly come from older, transitional claim accident periods.

9.5.3 Valuation results and actuarial release

Table 9.11 sets out the actuarial release resulting from our valuation of recovery payments. The first column represents our projection from the December 2020 valuation.

Table 9.11 – Actuarial release for Recoveries

Accident Period	Projected liab at Jun-21 from Dec-20 Valuation	Jun-21 estimate on Dec-20 eco assumptions	Difference from projected liability	Act v exp payments in 6 mths to Jun-21	Actuarial release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	(0.0)	0.0	
2005/06 - 2014/15	(1.4)	(1.4)	0.0	(0.1)	0.1	-8%
2015/16 - 2017/18	(10.3)	(11.6)	(1.3)	(1.7)	3.0	-29%
2018/19 - 2019/20	(13.8)	(15.0)	(1.1)	0.2	1.0	-7%
2020/21	(7.7)	(8.2)	(0.5)	(0.1)	0.6	-7%
Total	(33.3)	(36.1)	(2.9)	(1.7)	4.6	-14%

[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 $4.6m is a combination of actual recoveries being $1.7m above expectations combined with an increase of $2.9m in expected future recoveries due to PPCI selection changes.

9.6 LOEC, Commutations, and Common Law

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

9.6.1 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 2021, there are only four remaining claims. Our valuation basis is unchanged at this valuation.

9.6.2 Commutations

Commutation payments relate to claims receiving dependant benefits. Payments are volatile and in the last six months were lower than expectations. We have maintained our previous basis at this valuation.

9.6.3 Common Law

There were no common law payments in the last six months, with the last payment made in June 2009 to a claim from the 2005 accident year. 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. Our basis is unchanged at this valuation.

Potential common law entitlements for Serious Injury claims are considered in Section 10.

10 Serious injury claims

We note that the valuation assumptions and impact described here in Section 10 relates to the ‘baseline valuation’ only (see Section 3.1 for more information). The additional cost due to *Summerfield* is detailed in total in Section 11.

10.1 Overall results

Table 10.1 shows the central estimate of Serious Injury claims costs at 30 June 2021 and movement in our liability estimates since the December 2020 valuation.

Table 10.1 – Serious injury claims valuation results (excluding CHE)

	Income Support	Medical	Other (Care)	Hospital	Travel	Rehabilitation	Physical Therapy	Investigation	Legal - Non-Contract	Legal Contract	Lump sums	Recoveries	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
Dec-20 Valuation													
Estimated Liab at Dec-20	559	690	423	136	58	20	45	1	15	15	115	-36	2,043
Projected Liab at Jun-21	571	718	432	142	61	21	47	1	15	15	116	-36	2,104
Jun21 Valuation													
Impact of experience/basis change	43	3	12	10	-2	-1	3	0	1	1	11	2	83
Estimated Liab at Jun21 (Dec20 ecos)	614	720	443	152	59	20	51	1	16	16	127	-34	2,186
Impact of change in ecos	-19	-29	-18	-6	-2	-1	-2	0	0	0	0	-2	-80
Estimated Liab at Jun21 (Jun21 ecos)	596	691	426	146	57	19	48	1	16	16	126	-36	2,106
AvE Payments - six months to Jun-21	0	-1	1	0	0	0	0	0	0	0	2	2	2
Actuarial Release at Jun-21	-43	-1	-13	-10	2	1	-3	0	-1	0	-13	-4	-85

The outstanding claims cost for Serious Injury claims (excluding CHE) is $2,106m at 30 June 2021. The main movements from our December 2020 projection of the June 2021 liability are:

- Claims experience and basis changes increased the liability by $83m, as a result of:
  - > Net changes to claim numbers (including IBNR claims assumptions) increasing the liability by $81m, which was a combination of a $54m increase for Other Serious Injury claims and a $27m increase for Severe Traumatic Injury claims (each of these claims was actually a transfer of an existing Serious Injury from the Other Serious Injury cohort).
  - > Other changes increased the liability by $2m in aggregate.
- The change in economic assumptions at the current valuation resulted in a decrease of $80m.

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

10.2 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% or more, but not internally managed by ReturnToWorkSA.

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

Section 5.2 describes our projection of serious injury claim numbers.

10.3 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 10.2 – Approach to Setting Valuation Assumptions for Serious Injury claims[1]

	Severe Traumatic Injuries	Other Serious Injury
Life expectancy	Mortality improvement of 1.5% p.a. Mortality loadings for claims with high care needs (reducing life expectancy by 19 years) and for moderate care needs (reducing life expectancy by 7 years).	Mortality improvement of 1.5% p.a.
Income Support	To retirement age on all IS ongoing claims. Based on historical experience and estimates provided by ReturnToWorkSA.	To retirement age on all IS ongoing claims. Based on historical experience.
Treatment Related Costs and Other[2]	Paid for life. Based on historical experience and estimates provided by ReturnToWorkSA, with the exception of Hospital costs, which are based on selected payment per active claim curves for this cohort. Allowance for IBNER on Other and 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 potential.	Applied a recovery as a proportion of gross payments for future periods.
Common Law	Not available to pre-1 July 2015 claims, and included in the cost of statutory entitlements for post-1 July 2015 claims.	
Future cost escalation	WCI: Income Support AWE: Recoveries, Treatment and Other, Legal and Investigation Superimposed: 2% p.a. on Treatment, 1.5% on Other Needs Utilisation: 75% loading applied at age 65 on Treatment and Other, capped at 30 hours of care per day	WCI: Income Support AWE: Recoveries, Treatment and Other, Legal and Investigation Superimposed: 2% p.a. on Treatment, 1.5% on Other
IBNR Assumptions	IBNR claims in the latest four accident years only with the exception of one IBNR claim in the 2013 accident year. This is based on advice from RTWSA that one claim will be moving from Other Serious Injury to Severe Traumatic Injury in the next six months (i.e. this allowance is for a known claim). Claim size based on historical experience of current claims.	IBNR claims on all accident years, reflecting outstanding Serious Injury applications and WPI disputes (for older accident periods) and the delay from injury to WPI assessment (for newer accidents). Claim size based on historical experience of current known and potential claims.

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

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

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

The Severe Traumatic Injury valuation is reliant on estimates provided by ReturnToWorkSA. As ReturnToWorkSA has become more familiar with this process we are seeing fewer large movements from valuation to valuation, with estimates reflecting changes in claimant circumstances rather than short-term volatility in benefit utilisation.

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

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

> Income Support, Treatment and Other – Payments per Active Claim. The only decrement for Treatment and Other payments is mortality, while Income Support payments have an additional decrement for retirement

> Legal and Investigation – Payments per Claim Incurred

> Recoveries – Proportion of Gross Payments

- These models were adopted for the following:

  > All IBNR claims and future accident years

  > All Legal, Investigation and Recovery payments

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

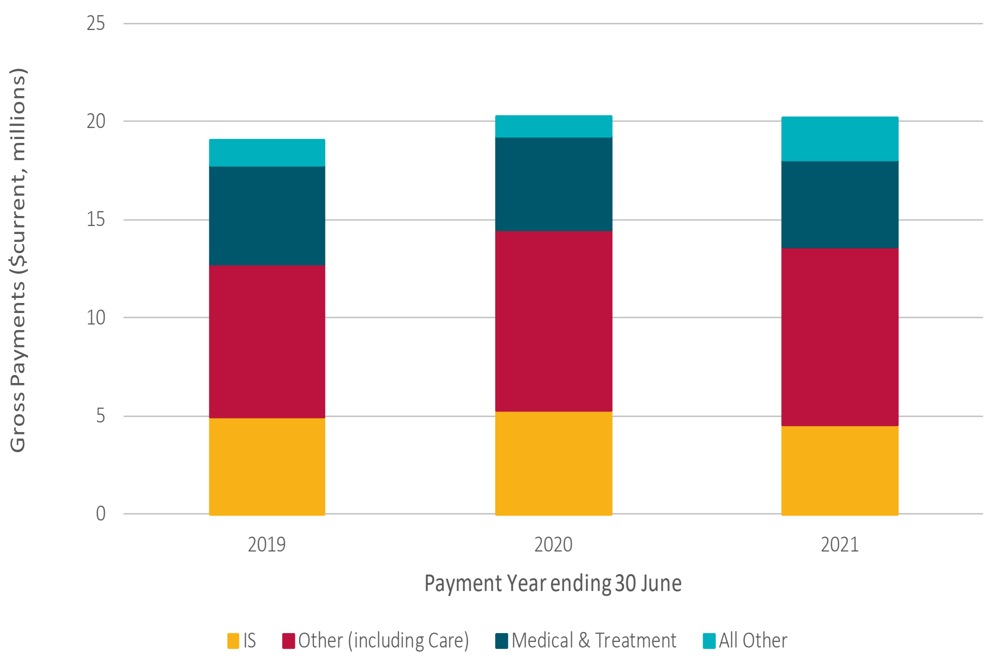
One of the key determinants of very long term costs will be how much, if any, of the costs associated with ageing are compensated out of the compensation scheme. Based on the experience to date, albeit on a relatively small number of claims who have been through this process, the costs for age related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

10.4 Valuation of Severe Traumatic Injury claims

10.4.1 Payments by type

Figure 10.1 shows claim payments over the past three years for Severe Traumatic Injury claims.

Figure 10.1 – Severe Traumatic Injury claim payments ($Jun21)



$59m has been paid to Severe Traumatic Injury claims in the last three years. After allowing for recoveries of $2.4m over this same period, this equates to an average of around $19m per annum in net claim payments (inflated to 30 June 2021 values), comprising around:

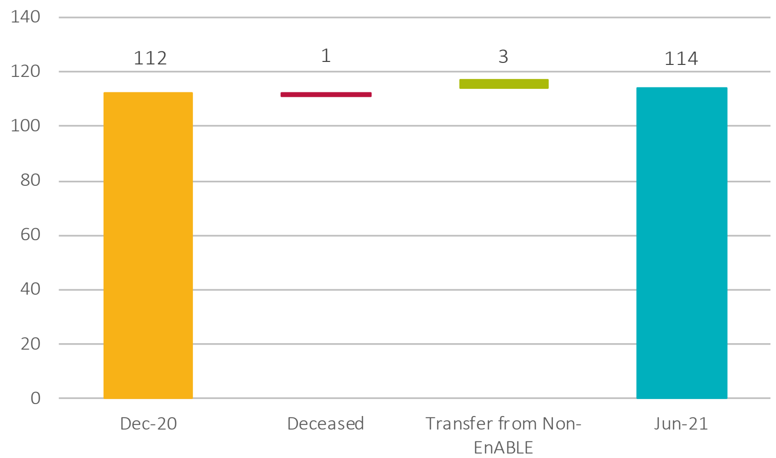
- $8.7m per annum in care and other costs

- $4.7m per annum in medical, treatment and related benefits
- $4.9m per annum in income support
- $1.1m per annum in lump sums
- Small amounts of legal and investigation payments ($0.4m per annum)
- $0.8m per annum in recoveries.

10.4.2 Claimant profile

Figure 10.2 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 10.2 – Movement in Severe Traumatic Injury claim numbers

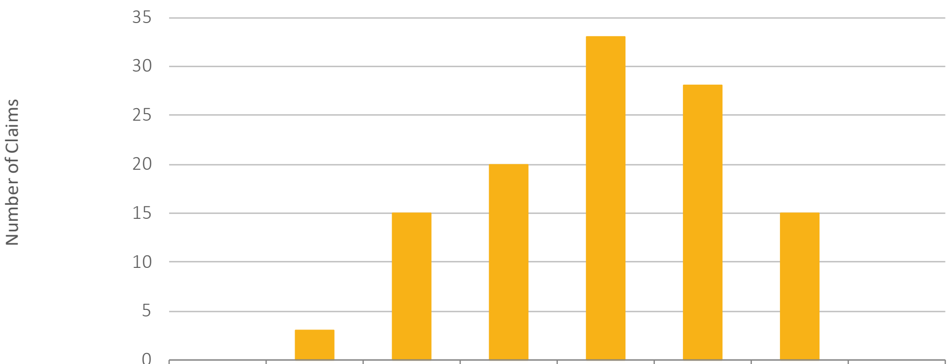


There are 114 active (i.e. with expected ongoing benefits) Severe Traumatic Injury claims at June 2021, compared to 112 active claims at the previous valuation. The movement in active Severe Traumatic Injury claims over the last six months is a result of:

- Death – reduction of one claim
- Transfer from Other Serious Injury to Severe Traumatic Injury – increase of three claims.

Figure 10.3 shows the age and life expectancy of the current Severe Traumatic Injuries.

Figure 10.3 – Age distribution and life expectancy (in years) of severe traumatic injuries



	<20	20s	30s	40s	50s	60s	70s	Older
Number of Claims	0	3	15	20	33	28	15	0
Loaded Life Expectancy	0	59	42	35	24	16	11	0

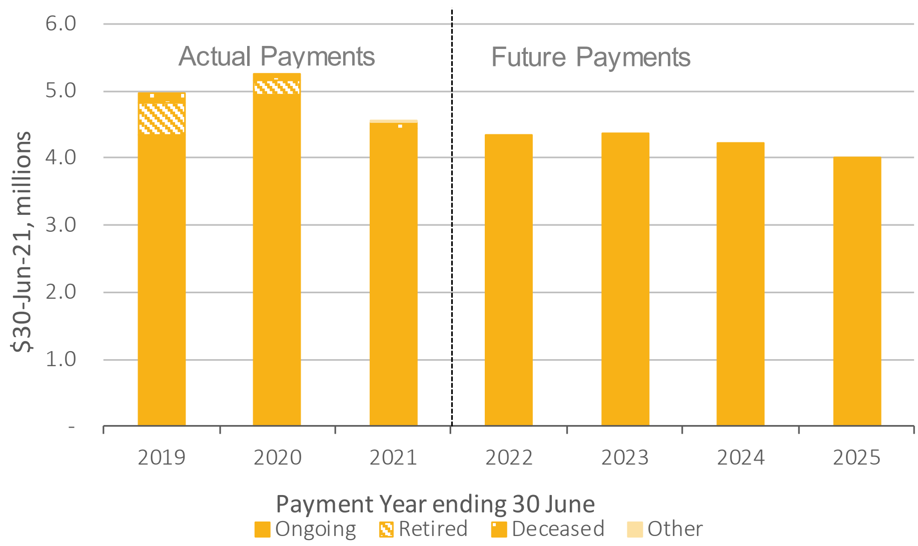
Severe Traumatic Injury claimants are currently around 56 years old on average, with an expected future life expectancy of around 29 years (after allowing for mortality, mortality improvements and mortality loadings). The average age at injury was about 40 years.

Nearly 60% of the current Severe Traumatic Injuries have a WPI assessment, with an average WPI of around 55%; the relatively low completion rate is partly explained by older claims being paid their lump sum prior to the introduction of WPI assessments in 2009. At this valuation, there are 12 claims with recorded WPI assessments less than 30%; ignoring these claims, the average assessed WPI is approximately 61%.

10.4.3 Income support

Figure 10.4 shows historic and projected Income Support payments for Severe Traumatic Injury claims (including IBNR claims, but only on existing accident years).

Figure 10.4 – IS Payments: Severe Traumatic Injury Claims ($Jun21)

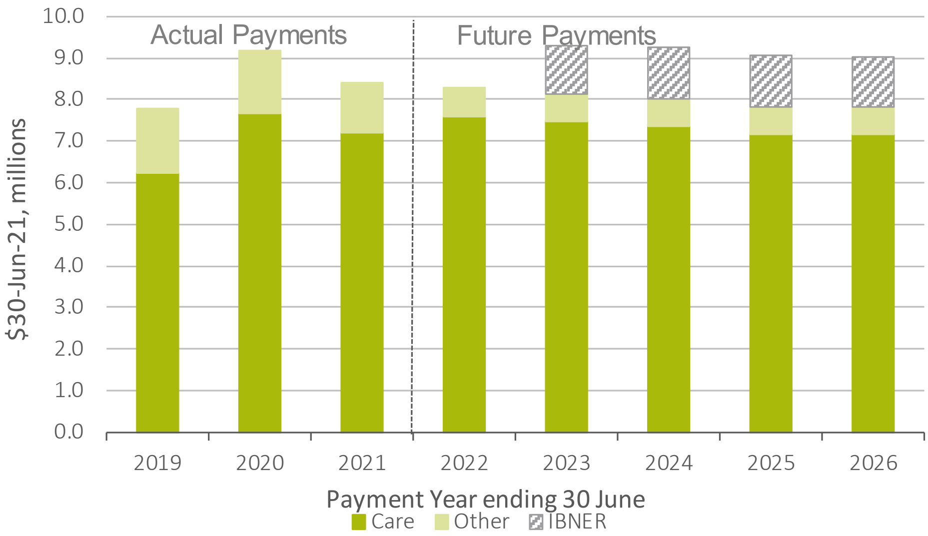


We estimate around $4.4m will be paid in Income Support to Severe Traumatic Injury claims in 2022. Future payments reduce over time in line with changes in replacement ratios, expected mortality and retirement, with the outstanding claim projection equivalent to 14 years of the expected 2022 payments (for known claims). The projected 2022 payments are similar to the 2021 actual payments.

10.4.4 Care and other costs

Figure 10.5 shows historic and projected care and other payments for Severe Traumatic Injury claims (including IBNR claims).

Figure 10.5 – Other (incl. care) payments: Severe Traumatic Injury claims ($Jun21)

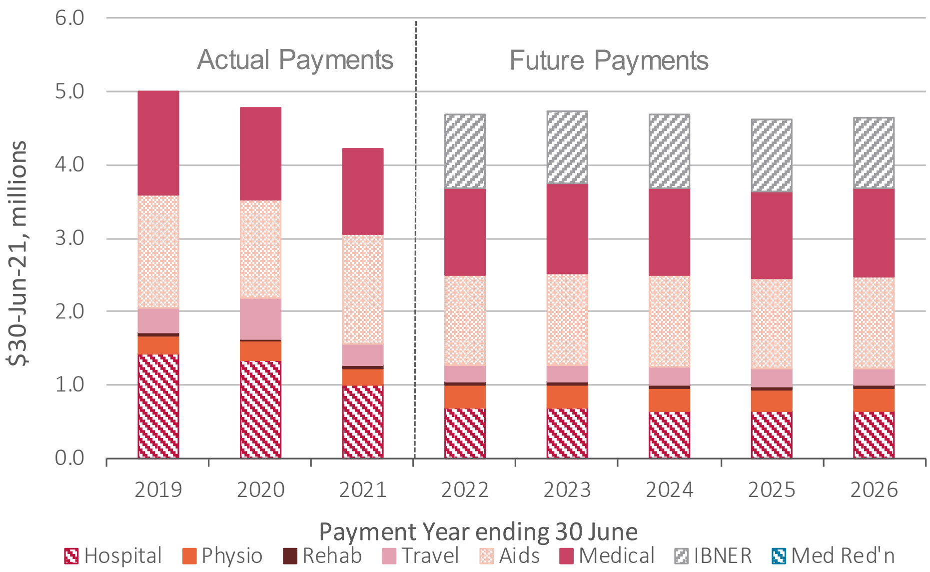


We expect $8.3m of other and care payments in 2022, which is similar to actual payments in 2021; the mix however is slightly different, with the proportion of 'other' expected payments in 2022 being lower than the actual experience for 2021: this payment category includes things like home modifications or training, for which spend is not as recurrent as other payment types. Projected payments then increase in 2023 due to the 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 27 years of the expected 2022 payments, including the IBNER allowances.

10.4.5 Treatment and related costs

Figure 10.6 shows historic and projected treatment and related costs for Severe Traumatic Injury claims (including IBNR claims).

Figure 10.6 – Treatment and related payments: Severe Traumatic Injury claims ($Jun21)

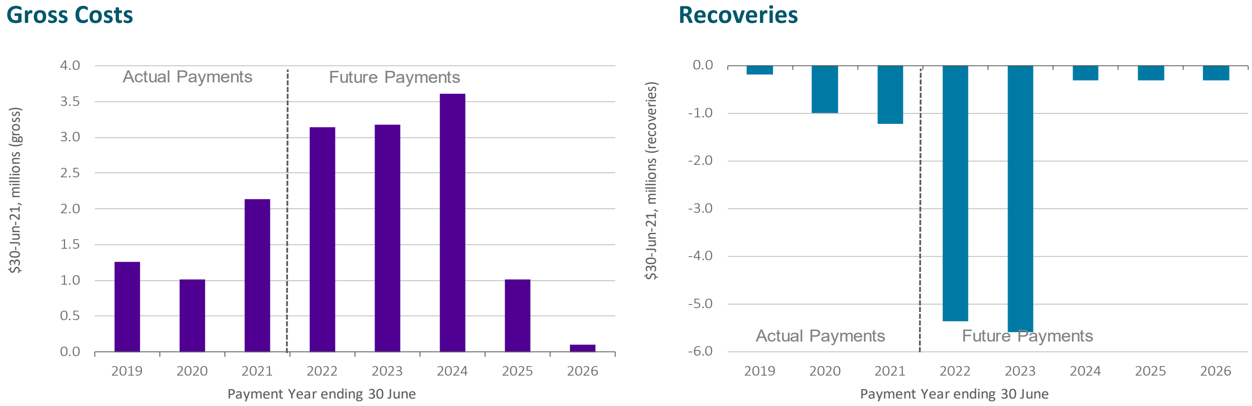


We expect future treatment and related payments of $4.7m in 2022, similar to the average over the last three years. The outstanding claims projection is equivalent to 32 years of the expected 2022 payments, including the IBNER allowances.

10.4.6 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 10.7 – All other payments: Severe Traumatic Injury claims ($Jun21)



In the three years to 30 June 2021, a net amount of $2.0m of other benefits was paid for Severe Traumatic Injury claims. Our future projections for claims occurring prior to 30 June 2021 include (in current dollars):

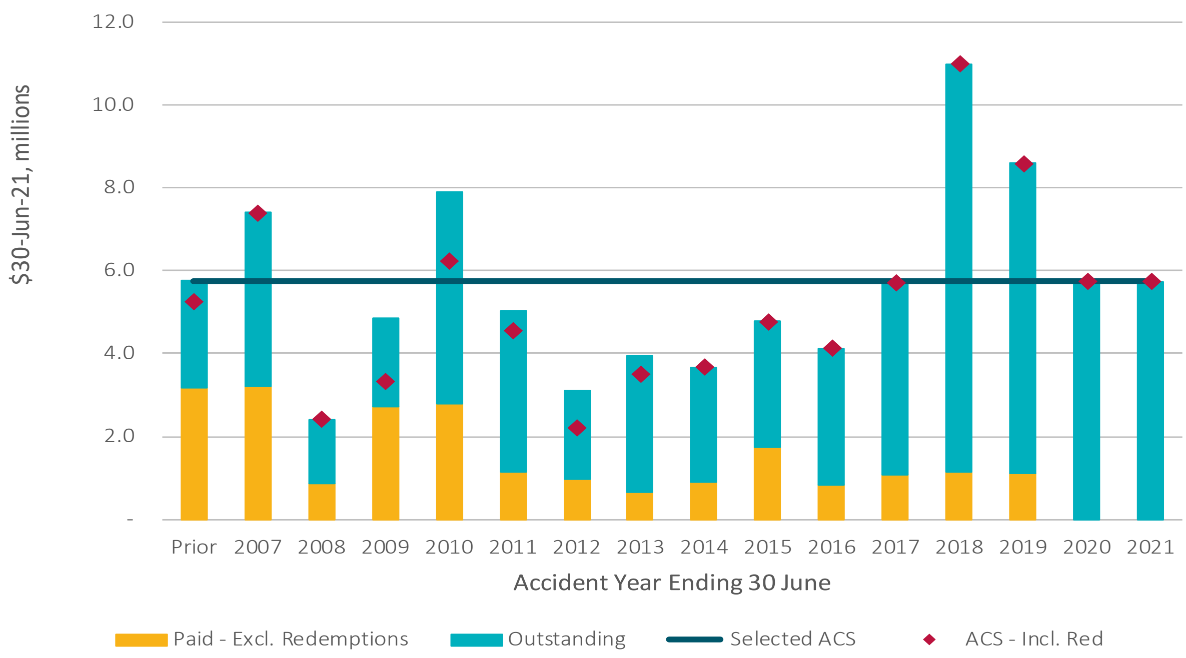
- Lump sum benefits of $10.9m paid to claims who have not yet had a lump sum paid
- Legal and investigation costs of $1.5m
- Recoveries of $12.4m, for those claims where ReturnToWorkSA has identified recovery potential. These recovery allowances have been discussed with the relevant ReturnToWorkSA staff and we are comfortable with the way they have been estimated and their expected achievability.

Due to the one-off nature of most of these payments, the outstanding liability is a much lower multiple of expected 2022 expenditure.

10.4.7 Overall results and implications

Figure 10.8 shows the net ultimate average claim size across current Severe Traumatic Injury claims. There is still a large share of the cost that is due to projected future payments, so there is greater uncertainty about ultimate costs than in other areas of the valuation.

Figure 10.8 – Average claim size: Reported Severe Traumatic Injury claims ($Jun21)



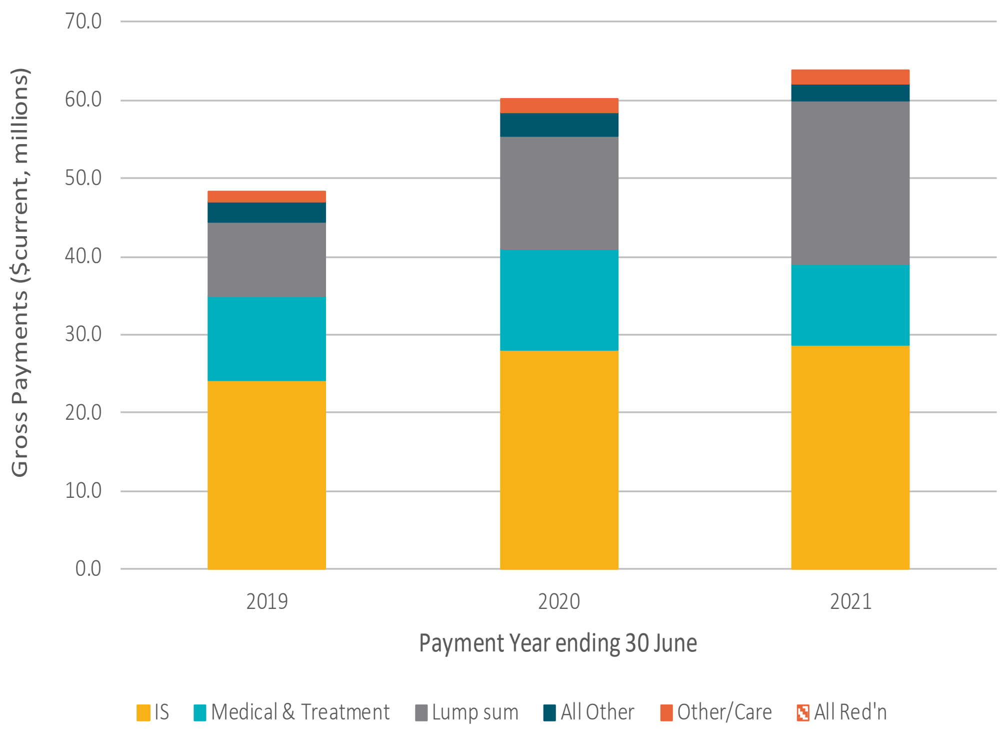
The average claim size across current Severe Traumatic Injury claims is around $4.9m in current dollar values; however, this includes claims that (in the past) were redeemed at less than the full lifetime value. Excluding redeemed claims the average claim size is $5.4m, which is similar to the projected average size ($5.7m) for recent accident years where injuries are yet to stabilise. We project that the average size for the 2018 and 2019 accident years will end up higher than this in response to two (very) high needs claims.

10.5 Valuation of other Serious Injury claims

10.5.1 Payments by type

Figure 10.9 shows claim payments over the past three years for the Other Serious Injury claims (i.e. excluding the Severe Traumatic Injuries).

Figure 10.9 – Other Serious Injury Claim Payments ($Jun21)



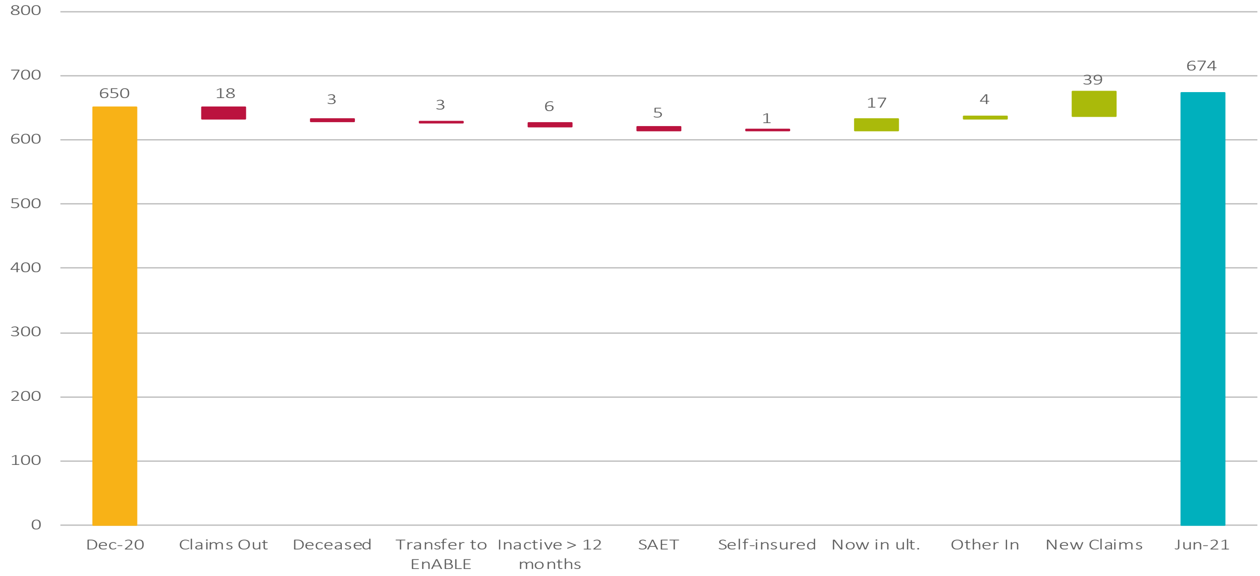
Around $172m has been paid to Other Serious Injury claims in the last three years, with year on year growth as claim numbers increase. After allowing for recoveries of around $6m over this same period, this equates to an average of around $55m per annum in net claim payments (inflated to 30 June 2021 values), comprising:

- $27m per annum in Income Support
- $11m per annum in medical, treatment and related benefits
- $15m per annum in lump sums
- Small amounts of other benefits ($4m)
- $2m per annum in recoveries.

10.5.2 Claimant profile

Figure 10.10 shows the number of active Other Serious Injury claims (those being valued) at the current and previous valuation.

Figure 10.10 – Movement in other Serious Injury claim numbers



There are 674 active (i.e. with expected ongoing benefits) Other Serious Injury claims at June 2021, compared to 650 at the previous valuation. The components of this change are:

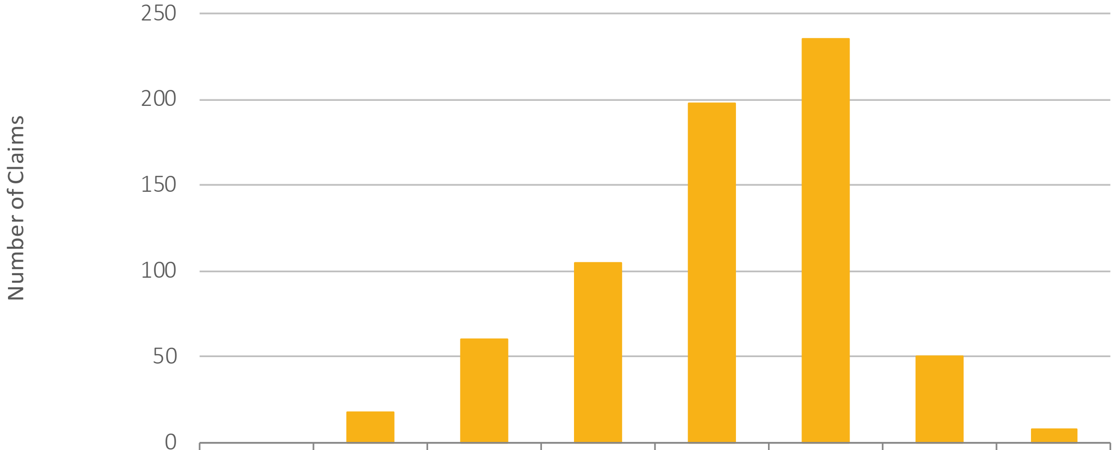
- Claims Out – reduction of 18 claims. This largely refers to claims from the 'potential' cohort which were either confirmed not to meet the eligibility criteria for a Serious Injury claim, or where additional information has meant that their likelihood of becoming a Serious Injury claim has been revised.
- Deceased – reduction of three claims.
- Transfer to EnABLE – reduction of three claims.
- Inactive for greater than 12 months – reduction of 6 claims as no longer meet our definition of 'ongoing'.
- SAET claims – removed for the 'business as usual' valuation as they are *Summerfield* related and so are included in that part of the valuation.
- Self-insured – reduction of one claim.
- Revised ultimate status – increase of 17 claims. This increase is due to claims that had previously been identified as a potential Serious Injury, but who were not considered as likely to meet the threshold at their most recent review. Most of these claims are now included due to formal determinations.
- Other in – increase of 4 claims.
- New Claims – increase of 39 claims beyond the other claims noted above.

We note that the numbers in Figure 10.10 refer to claims that are Medical ongoing (which is the broadest group of ongoing claims).

With the portfolio still maturing we would generally expect the number of Other Serious Injury claims to increase each six months.

Figure 10.11 shows the current age and life expectancy of the known and potential Other Serious Injury claims.

Figure 10.11 – 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	60	105	198	235	50	8
Life Expectancy	0	62	52	42	31	23	15	8

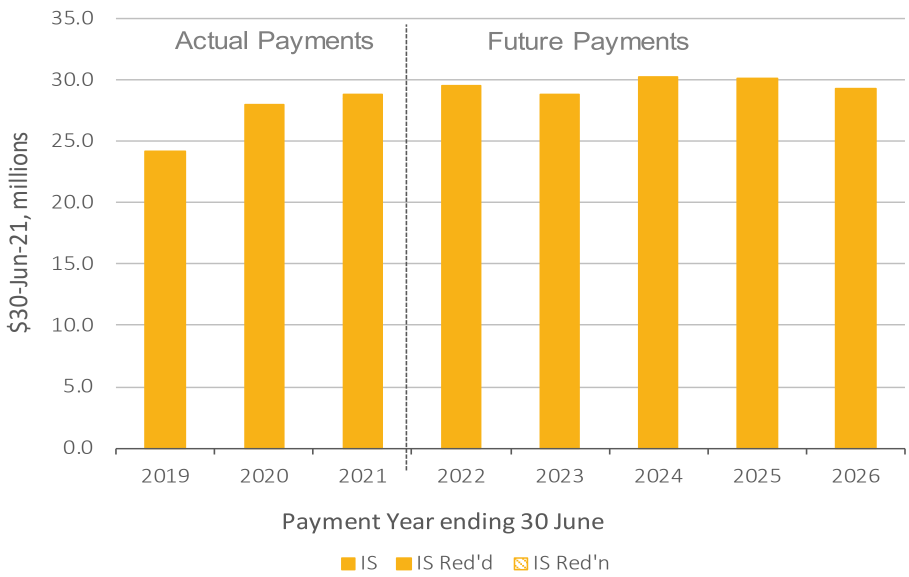
The Other Serious Injury claims are currently around 57 years old on average, with an expected future life expectancy of 31 years (after allowing for mortality, including mortality improvements). The average age at injury was 47 years.

Around 72% of the current Other Serious Injuries have had a WPI assessment, averaging around 37% WPI. At this valuation, there were 74 claims with recorded WPIs below 30%. The average impairment level excluding these low assessments is around 39%.

10.5.3 Income support

Figure 10.12 shows historic and projected Income Support payments for Other Serious Injury claims (including IBNR claims).

Figure 10.12 – IS payments: Other Serious Injury claims ($Jun21)

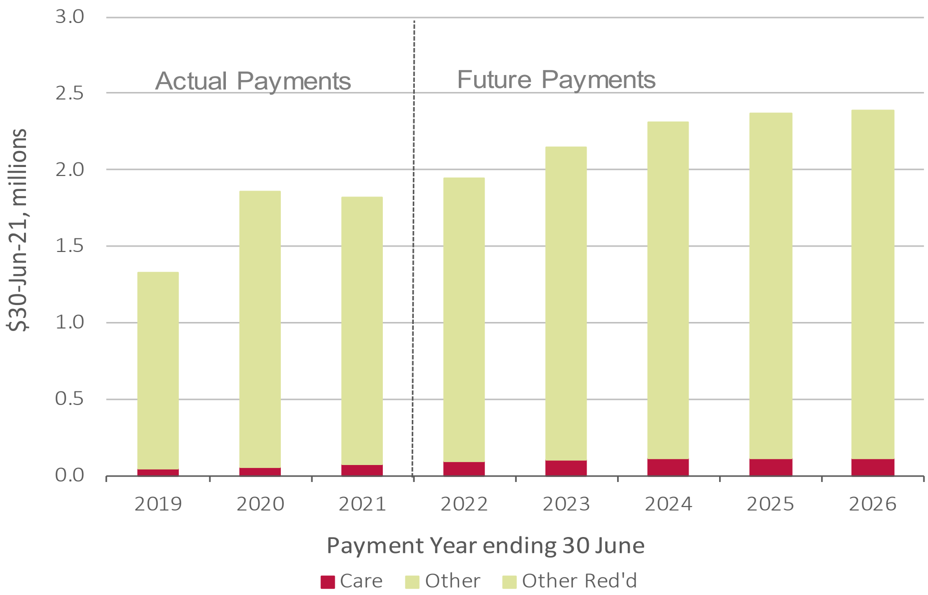


We estimate around $30m will be paid in Income Support to Other Serious Injury claims in 2022. Future payments will generally reduce over time in line with expected mortality and retirement, although the emergence of IBNR claims means payments remain fairly stable for the next four years.

10.5.4 Care and other costs

Figure 10.13 shows historic and projected care and other payments for Other Serious Injury claims (including IBNR claims).

Figure 10.13 – Other (incl. care) payments: Other Serious Injury claims ($Jun21)

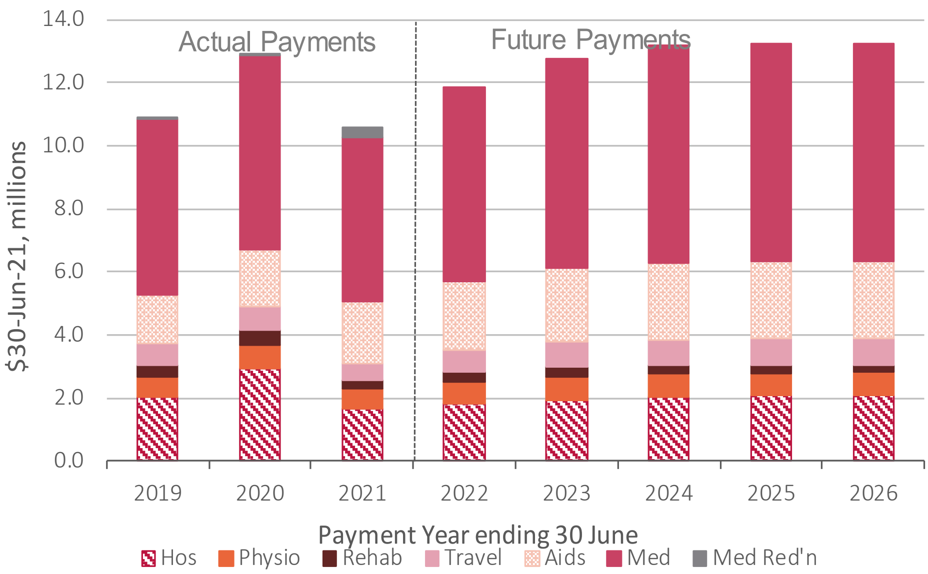


Other Serious Injury claims receive very little in care costs. We expect around $1.9m in other payments in 2022.

10.5.5 Treatment and related costs

Figure 10.14 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 10.14 – Treatment and related payments: Other Serious Injury claims ($Jun21)



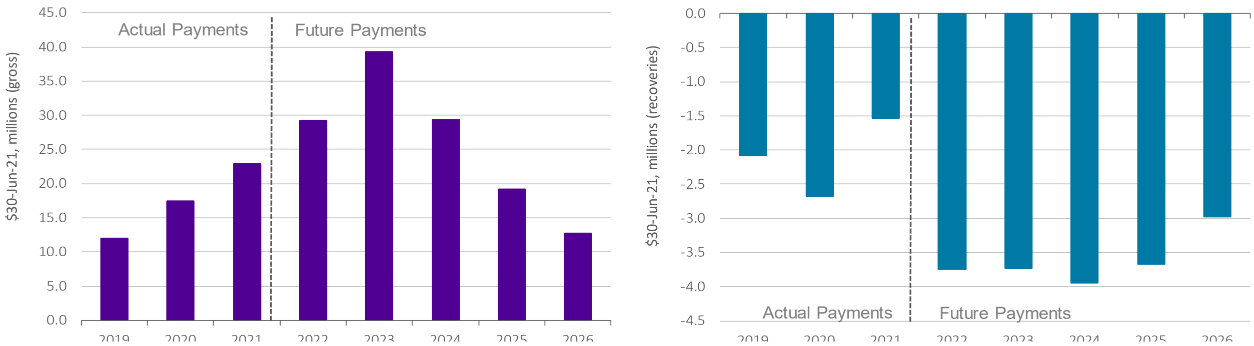
We expect treatment and related payments of $12m in 2022 for ongoing claims. Payments increase in future years due to IBNR claims, offset by reductions over the longer term in line with mortality.

10.5.6 All other payments

Figure 10.15 shows historic and projected other benefits for Other Serious Injury claims (including IBNR claims).

Figure 10.15 – All other payments: Other Serious Injury claims ($Jun21)

Gross Costs **Recoveries**



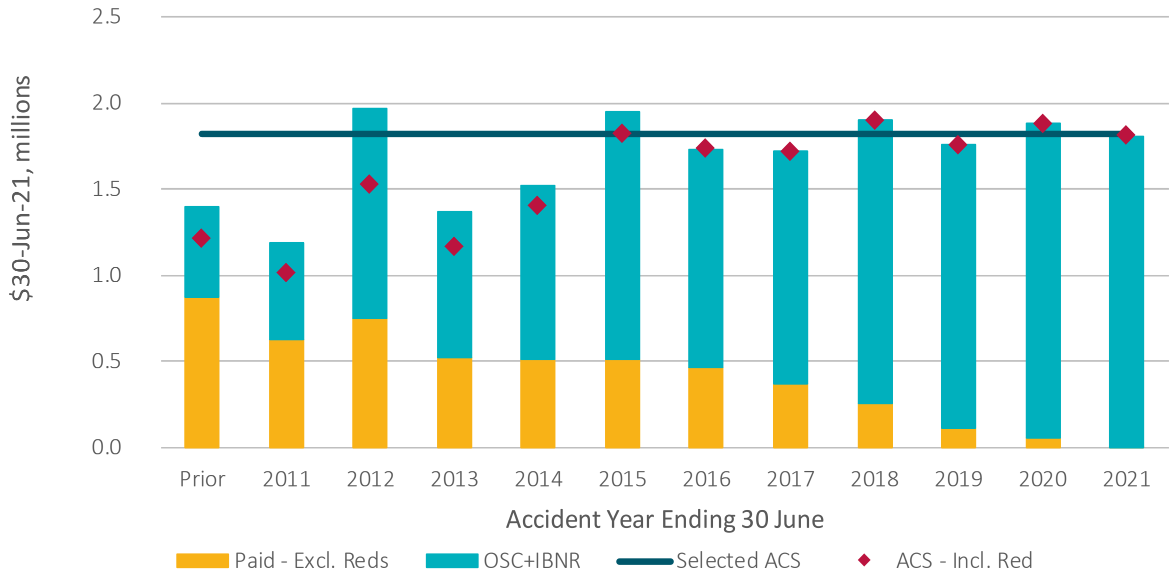
Our future projections include (in current dollars):

- Lump sum benefits of $117m paid to Other Serious Injury claims who have not yet had a lump sum paid
- Legal and investigation costs of $30m
- Recoveries of $23m.

10.5.7 Overall results and implications – Other Serious Injuries

Figure 10.16 shows the net ultimate average claim size (inflated to 30 June 2021 values) across all Other Serious Injury claims.

Figure 10.16 – Average size by payment type: Other Serious Injury claims



The total selected average size is around $1.8m. Pre-2015 accident years have a lower size due to redemptions on claims for less than lifetime cost and a higher level of claims no longer being valued for ongoing benefits (which is likely because some claims from these periods are only being flagged as 'potential' Serious Injury claims due to past WPI information despite no longer being engaged with the Scheme).

More detail on the selections underlying this average size can be found in Appendix A.6.4.

10.6 Valuation results and actuarial release

Table 10.3 shows the actuarial release by accident period for Serious Injury claims.

Table 10.3 – Actuarial release: Serious Injuries

Accident Period	Projected Liab at Jun-21 from Dec-20 Valuation	Jun-21 Estimate on Dec-20 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 months to Jun-21	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 05	239.8	232.9	-6.8	-0.1	6.9	3%
2005/06 - 2012/13	529.3	545.3	16.1	-4.7	-11.4	-2%
2013/14 - 2014/15	257.3	252.1	-5.2	-2.0	7.2	3%
2015/16 - 2020/21	1,077.3	1,156.1	78.7	9.0	-87.7	-8%
Total	2,103.7	2,186.4	82.7	2.3	-85.0	-4%

[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:

- Transition accident periods (pre-Jun15) experienced little movement overall, with offsetting pluses and minuses by accident year.
- Return To Work Act periods experienced a strengthening of $88m, due almost entirely to increases in estimated Other Serious Injury claim numbers.

Table 10.4 shows the drivers of the actuarial strengthening for Serious Injury claims.

Table 10.4 – Components of actuarial release: Serious Injury claims

Release (strengthening) due to:	Other Serious Injury	Severe Traumatic Injury	Total
	$m	$m	$m
AvE payments in six months			(2.3)
Changes to Valuation Basis			
Claim numbers	(54.2)	(26.6)	(80.8)
Other basis changes	(18.1)	16.2	(1.9)
Subtotal	(72.3)	(10.5)	(82.7)
Total			(85.0)

The main drivers of the movement were:

- Net changes to claim numbers (including IBNR claims assumptions) increasing the liability by $81m. While this is presented as being due to a combination of a $54m increase for Other Serious Injury claims and a $27m increase for Severe Traumatic Injury claims, given each of the three new Severe Traumatic Injury claims were already recognised as part of the previous Other Serious Injury valuation this component is mostly an internal re-allocation. As such, the $81m strengthening is primarily a result of further increases in the expected number of Other Serious Injury claims.

- Other changes, largely the various average size components, increased the liability by $2m in aggregate.

11 Additional cost due to *Summerfield*

Section 4.2.1 summarises the *Summerfield* decision and its implications for the actuarial valuation. In the interests of brevity we have not reproduced that content here.

As explained in Section 3.1.2, following *Summerfield* we have had to make an allowance for the potential costs of this decision should it not be overturned on appeal. To assess the central estimate and provision required, we have had to utilise different to normal techniques, given the cost that eventuates will depend on the (currently unknown) outcome of ReturnToWorkSA's High Court appeal.

This section explains how we have approached the reserving for *Summerfield*, before detailing the resulting cost estimates.

11.1 Which claims are impacted by *Summerfield*?

Our first step to estimating the financial impact of *Summerfield* was to identify segments of claims where the costs are, and are not, at risk due this decision. In order to identify these segments we have had extensive conversations with ReturnToWorkSA's internal legal and operational teams. This has allowed us to develop some basic operational rules to determine the pool of claimants for which the *Summerfield* decision may have an impact.

Figure 11.1 shows a flow chart of these operational rules and the high level likelihood of the claim being impacted by the *Summerfield* decision depending on where it sits in the question set.

Figure 11.1 – Claims impacted by *Summerfield*

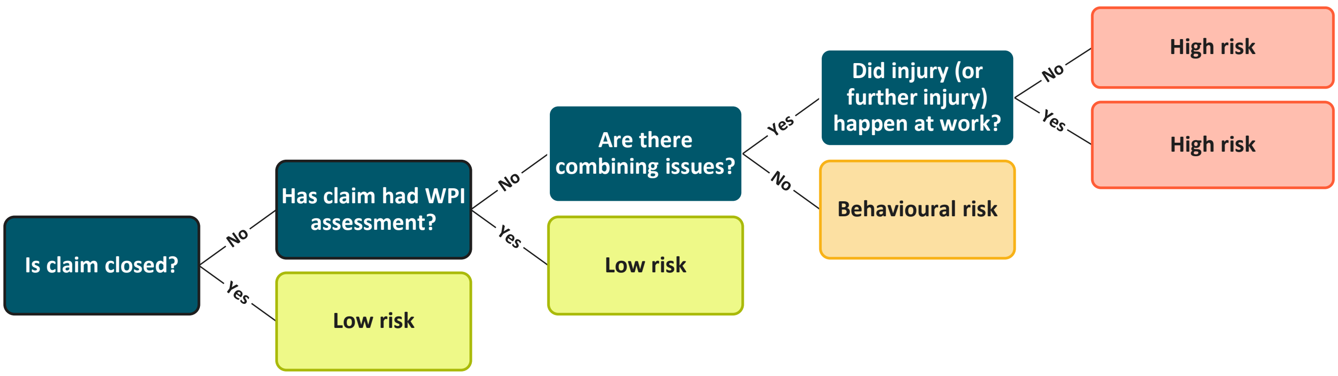


Table 11.1 below provides more detailed discussion relating to the claim categories outline above and our understanding of the legal and operational reasons that make the risk allocations appropriate.

Table 11.1 – Discussion of claim categories and risk allocations

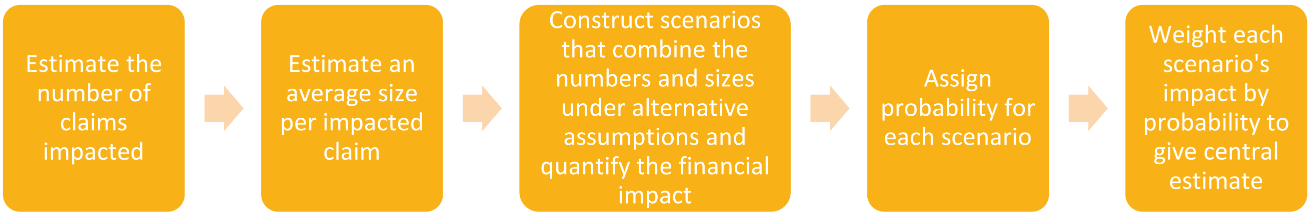
Claim Characteristic	Risk Rating	Reasoning
Closed Claims	Low Risk	Redeemed claims cannot be reopened. Transitional claims (i.e. old Act injury dates) that ceased IS benefits prior to RTW Act with no lump sum paid could theoretically gain SI status, but would be limited to medicals only. Claims with Sealed Orders (i.e. past disputes) would be dependent on terms, but generally hard to reopen. Closed claims with WPI paid are still subject to single WPI assessment so cannot reopen and be assessed for extra WPI. Other closed claims are assessed as low risk based on an operational assessment that any *Summerfield* type claims would have likely already started to build additional injuries on their claim and continue with scheme activity such as litigation rather than close the claim, cease activity then come back at a later date. The risk is not nil, but it is minimal. The low risk assigned to this segment is important, given the large number of past claims in the scheme.
Those who have already had a WPI assessment	Low Risk	There is some reference to the concept of one assessment within *Summerfield* but it is not touched on in great detail. ReturnToWorkSA have not changed their approach to what is considered one assessment and at present this is not being challenged through assessment requests or litigation. While this is theoretically open to challenge, unless there is new case law or some other impetus, the approach will be unchanged.
Claims without combining issues (no WPI assessment)	Behavioral risk only	Claims who have not yet had a WPI assessment and do not have combining issues don't have any current impact from *Summerfield.* However, ReturnToWorkSA is exposed to a risk of attempted behavioural changes from this group. Specifically, it is plausible that some claims will attempt to bring other incapacity into the claim to boost the WPI score (noting also that there is already a high rate of legal involvement in the scheme).
Claims with combining issues (no WPI assessment) Injury not at work	High risk	This is the circumstance from *Summerfield*, and in this case there is a high likelihood that the *Summerfield* decision could be used to allow subsequent injuries to be combined, increasing the chance of claimants meeting the serious injury threshold or getting a higher lump sum.

Claims with combining issues (no WPI assessment) Injury at work	High Risk	For those where the further injury happened at work, then this should result in a new claim, so this is more a consideration for future accident year costs than an outstanding claims liability. Any WPI already assessed on an original injury is a deduction from the new WPI. Can't combine both original injury WPI and aggravation WPI towards Serious Injury threshold. Good claims management practices will be required to identify and respond to this situation.

11.2 Methodology

In accordance with the relevant Actuarial and Accounting standards, the central estimate is required to be the mean of the distribution of possible outcomes. To determine the central estimate then, it is necessary to specify what the possible outcomes are, and to then attach likelihoods to them – the costs under the different possible outcomes are then combined with the likelihoods of each outcome occurring to determine the central estimate. Figure 11.2 summarises the steps we have taken to estimate the central estimate impact under this framework.

Figure 11.2 – Summerfield impact framework



The scenarios we have developed to assess the potential *Summerfield* impacts are:

1. No impact scenario – ReturnToWorkSA is fully successful on appeal and the previous interpretation is re-established.

2. Lower impact scenario – this assumes ReturnToWorkSA is partly successful on appeal or with subsequent mitigation strategies, that means fewer claims are impacted and/or the average size on impacted claims is lower than in the mid-range case.

3. Mid-range impact scenario – findings from the file review work are extrapolated across the broader cohorts (which we are comfortable to do, given we had control of the sampling process that guided the file review work), and allowances are made for the estimated impact of different types of combination issues, before an additional 'actuarial best guess' IBNR is included.

4. More adverse impact scenario – behavioural responses from claimants and their advisors lead to additional claims being impacted over time.

   (NB: we note that scenario 4 is not intended to represent a maximum possible impact scenario)

The scenarios and their likelihoods are combined to estimate the additional central estimate cost due to *Summerfield*. This is then combined with the Baseline valuation to determine the central estimate post-*Summerfield.*

Finally, in accordance with ReturnToWorkSA's reserving policy we are required to recommend a risk margin that is intended to provide a 75% probability of sufficiency (across the overall post-*Summerfield* reserve). To do this we have used the scenarios and their likelihoods from above, along with consideration of the risk allowances in the baseline valuation as well as the potential for there to be 'diversification benefits' between the updated Serious Injury risks and those, which are largely independent, in the Short Term Claims part of the portfolio.

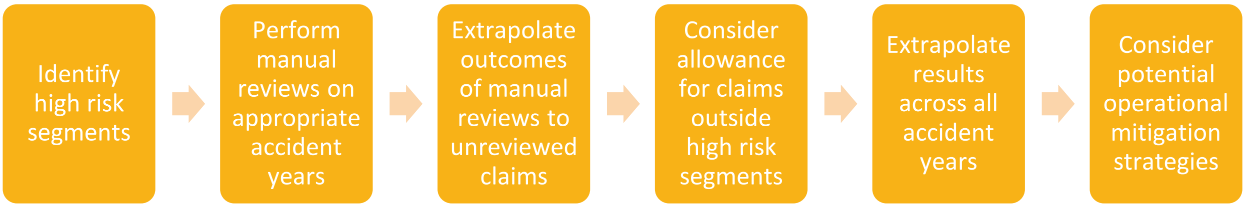
11.3 Estimating the number of claims impacted

11.3.1 Serious Injury claims

Approach

The framework for identifying the potential pool of additional Serious Injury claims is as follows:

Figure 11.3 – Serious Injury framework



The following sections describe each of these steps.

High risk segments

Three broad high risk segments were identified as being impacted by *Summerfield*:

1. Claims declared as Serious Injury by SAET. These claims have been declared as Serious Injury claims (and currently have access to the Serious Injury benefits package), but are reliant on combining injuries to reach the threshold. There are only 15 of these claims, of which 11 are from 2014-2017 accident years, and the remainder from older accident years.
2. Claims that have been identified by ReturnToWorkSA's external panel law firms as having open disputes that relate to the combination of injuries.
3. The sources we use for the ground-up calculation of Serious Injury IBNR (as discussed in Section 5.2) as many of the claims that remain open in these segments have legal involvement and are at risk of seeking to combine injuries. The only exception is claims that have commenced WPI activity, but only have one accepted injury have been excluded, given *Summerfield* is not relevant to these claims given their current status.

The high risk segments operated as a hierarchy; that is, workers are only counted once across all segments.

In order to satisfy ourselves that these claims cover all high risk segments, we have categorised all open claims (excluding hearing loss claims) from 2014-2018 accident years into where they are considered in the high risk segments, and if they fall outside the high risk segments, the reasons that they remain open.

Table 11.2 – All open claims categorised into high risk segments

AY	Total active[1]	High risk segments: SAET	Lawyers	Ground up IBNR	Proportion of active	Other open claims: WPI activity, 1 injury	Other open dispute	Med cap/dependant/ future surgery	Other open
2014	103	2	27	15	43%	29	5	10	15
2015	136	3	35	17	40%	35	12	9	25
2016	286	2	69	58	45%	56	28	19	54
2017	357	4	86	93	51%	67	31	22	54
2018	628	0	109	169	44%	168	50	57	75
Total	1510	11	326	352	46%	355	126	117	223

[1]Excludes hearing loss and claims already counted as pre-Summerfield Serious Injury claims

Of the 1,510 active claims (excluding hearing loss and claims already counted as Serious Injury in the pre-*Summerfield* valuation):

- 689 (just under 50%) are counted in our high risk segments.
- For remaining active claims:
  - > 355 (around 25% of active claims) have open WPI activity, but only one accepted injury. These claims fall into the 'behavioural risk' segment in Table 11.1.
  - > 126 (just under 10%) have an open dispute, that does not relate to combination of injuries.
  - > 117 (just under 10%) are open due to either not having hit the medical cap, have dependant benefits or a future entitlement to surgery. Claims with a future entitlement to surgery will make up some of our general IBNR allowance, but it is not possible to assess their risk at the moment, with just an entitlement to future surgery being recorded.
  - > For the remaining 223 claims (around 15% of active claims), around half of them have received a lump sum and so considered 'low' risk as per Table 11.1. For the remaining claims, ReturnToWorkSA reviewed a sample and it was decided they didn't pose a material risk due to *Summerfield* (e.g. operational processes meant claim has been left as active, or the claim is active for third party recovery action, etc).

Manual reviews

Once high risk segments were identified, the number of claims that were likely to become Serious Injury due to *Summerfield* had to be estimated. Table 11.3 summarises the approach we took for different accident periods.

Table 11.3 – Claimant numbers: consideration of likely valuation impacts by accident year and sources of information

Accident period	Comments	Approach
2013 and prior	Active claims considered in OSC impact, but not used for estimating ultimate costs	Active claims: high risk segments identified and converted to *Summerfield* impact. Inactive claims: not considered.

2014-2018	Primary period for estimating *Summerfield* impacts due to: • Enough maturity such that high risk segments can be identified • Sufficient medical and medico-legal information has been collected to inform decisions on impacts at an individual claim level • Low levels of redemptions and/or closure, such that most claims with combination disputes are still unresolved.	Active claims: high risk segments identified and material proportion of claims manually reviewed. Outcomes of reviews extrapolated to unreviewed parts of each segment (noting claims were selected to ensure there were no obvious biases). Inactive claims: look for claims potentially impacted as identified through WPI information. No allowance in OSC (i.e. not assuming they will reopen as per Figure 11.1), but they are an important consideration in understanding potential number impact for more recent accident years.
2019+	Too immature to estimate impacts in a ground up approach.	Use estimated active + inactive impact from 2014-2018 as benchmark.

Key to estimating the additional number of Serious Injury claims was the manual review of claims in high risk segments from the 2014 to 2018 accident years. Claim reviews were undertaken by senior staff from ReturnToWorkSA's insurance operations team and its external legal providers (Minter Ellison and Sparke Helmore). The key question asked of reviewers was:

"is this claim likely to meet the Serious Injury threshold as a result of the Summerfield decision?"

[to be clear, all claims that were already considered as likely to meet the Serious Injury threshold were excluded from the review work – the focus was on identifying additional Serious Injury claims]

Only claims where the assessment was "very high probability"[3] were included in our findings. The reviewers were required to document the reasons for their decision, which usually involved reference to the WPI scores across the claimant's range of injuries.

The above approach leverages off work that has been undertaken as part of the biannual actuarial valuation work over the last six years (since the RTW Act commenced), where ReturnToWorkSA provides information on claims who are 'likely to be a Serious Injury' for use in our work. As such, we have a high level of confidence in both (1) the process followed to provide these claims review findings, and (2) the technical and operational knowledge of the ReturnToWorkSA staff and the outsourced legal providers who undertook the work.

As noted in Table 11.3, the files chosen for review were selected to ensure that there was no unintended bias that would distort results when the outcomes were extrapolated to unreviewed claims. This was achieved by:

- Breaking high risk segments into more granular and homogenous groups when selecting claims for review to ensure the sample was representative

[3] On a small number of claims (22) there were findings that the claim had a very high probability of being a Serious Injury post-*Summerfield* if another decision first went the claimant's way (usually this related to adding an additional injury) and where the reviewer thought it very likely that the claimant would have that other decision go their way – for these claims we have assumed a 75% success rate in them becoming Serious Injuries.

- Calculating the uncertainty in extrapolating the results of reviewed claims onto unreviewed claims by looking at the total claims in each segment, the proportion of claims reviewed and the outcomes of those reviews. The number of claims reviewed was set high enough to ensure confidence in the extrapolation.

Table 11.4 shows the number of claims identified as 'potentially impacted additional serious injury' as a result of the case file review.

Table 11.4 – Additional Serious Injury claims identified through manual reviews

Accident year	Identified in reviews[1]
2014	8
2015	21
2016	31
2017	39
2018	41
Total	139

[1]Claims described in footnote 3 counted as 0.75 of a claim

Overall, 139 additional Serious Injury claims were identified through manual review (this would have been 147, without adjusting some claims to a 75% likelihood).

Extrapolation of manual reviews

The table below shows the additional Serious Injury claims estimated from high risk segments, including extrapolation of review outcomes to unreviewed claims.

Table 11.5 – Additional Serious Injury claims from high risk segments

Accident year	SAET claims	Identified in reviews[1]	Extrapolated SI claims	BAU IBNR allowance	Adopted allowance
2014	2	8	8	-7	12
2015	3	21	4	-3	25
2016	2	31	13	-3	42
2017	4	39	16	-3	55
2018	0	41	34	-6	69
Total	11	139	75	-22	203

[1]Claims described in footnote 3 counted as 0.75 of a claim

Overall, we estimate an additional 203 Serious Injury claims from the 2014 to 2018 accident years:

- 150 of these claims have either been declared by SAET or were manually reviewed, so are not subject to any uncertainty from extrapolation.
- A further 75 additional Serious Injury claims are estimated by extrapolating the results of reviewed claims to unreviewed claims.
- This number is reduced by 22 claims when we consider the overlap between high risk segments used both here and our pre-*Summerfield* Serious Injury IBNR calculation (that is, it would be double counting to include the same claims in both the *Summerfield* allowance and the baseline valuation work).

The majority of additional Serious Injury claims identified from each accident year are from either SAET declared or manually reviewed claims, which provides comfort that the level of uncertainty due to extrapolation is not too great.

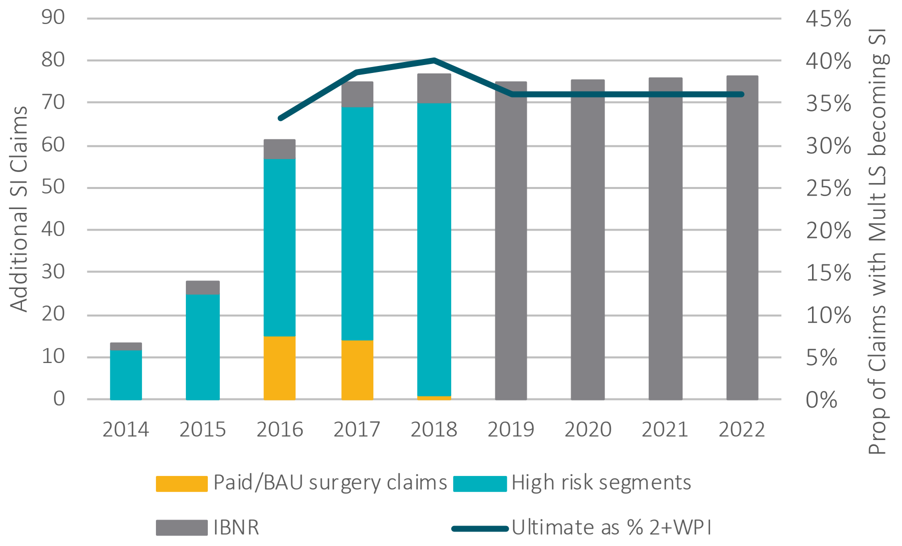
Additional allowance outside of the high risk segments

In addition to the Serious Injury claims estimated through high risk segments, we have also made an additional loading of 10% for 2018 and prior accident years. This recognises that not all additional Serious Injury claims will come from the currently identified high risk segments. Although the assumed level is judgemental, it is informed by the baseline valuation work over recent years.

Potentially impacted additional Serious Injury claims

Combining the components described above, the potentially impacted additional Serious Injury numbers are shown below in Figure 11.4. As discussed in Table 11.3, 2019 and more recent accident years are too immature to estimate the number of additional Serious Injury claims through high risk segments. We have therefore set the potentially impacted additional Serious Injury numbers for these years close to the 2017 and 2018 results.

Figure 11.4 – Additional Serious Injury claims



We also show the total count as a proportion of our estimate of the total number of lump sum claims with multiple WPI scores (i.e. the number of lump sum claims that are potentially impacted by *Summerfield*); for 2019 and more recent accident years this proportion is 36%.

Potential operational mitigation strategies

ReturnToWorkSA's current legal advice is that even if they are unsuccessful in appealing *Summerfield* they may be able to mitigate the impact for cases that, while having combining issues, are not a direct application of the *Summerfield* decision. We have segmented the 'potentially impacted' cohort of claims into three categories (based on file review findings) to assess the likely impact of operational mitigation strategies.

For a subset of the total manual reviews performed, the reviewers were asked to also consider which of the following categories claims fell into:

- Category A: injuries where the claim circumstances are aligned to those from *Summerfield*, and as such where a straight application of the combining rules would result. Examples include
  - > Altered gait, with no intervening event or contribution from a return to work

> New injury arising from surgery.

- **Category B**: injuries that have not been explicitly addressed in the judgement and so there is less guidance on the relevant approach to combination. For these injuries it is likely that ReturnToWorkSA will need to form a legal challenge to separate these types of claims from direct *Summerfield*-like claims. Examples include:

  > Medication related impairments (this makes up the majority of Category B claims). The *Mitchell* case was an example of this type of situation, although we are advised that *Mitchell* will only be of limited direct relevance here given it was in relation to a transitional claim and because there are wording differences between the Old Act and the RTW Act it would require a new legal precedent.

  > Use of aids.

- **Category C**: injuries with one or more other causes that contribute to the overall impairments such that they cannot be considered to arise from the same cause as the original injury and therefore should not be combined. There are some judgements from the SAET that have applied this approach, rather than a 'common underlying cause' approach. Examples include:

  > Slip, trip, fall.

  > Altered gait with an intervening event or a contribution from the worker's return to work.

Out of the claims reviewed, only a trivial amount were categorised as Category C, with around half of the claims being categorised as Category A and half as Category B. For the purpose of assessing the impact of mitigation strategies we have assumed that across all potentially impacted additional Serious Injury claims, 50% are Category A and 50% are Category B.

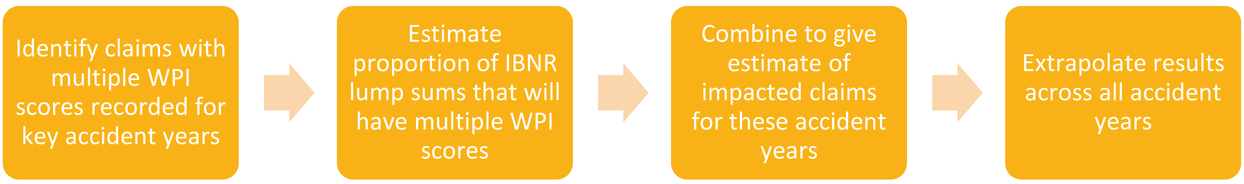
In order to determine the number of additional Serious Injury claims to include in the central estimate we consider the impact of operational mitigation strategies. These operational mitigation assumptions are discussed in further detail in each scenario (Section 11.5 below).

11.3.2 Lump Sum claim numbers

Approach

The framework for identifying the number of claims who receive a lump sum is as follows:

Figure 11.5 – Lump Sum framework



The pool of potential claimants for which *Summerfield* will impact their entitlement to lump sum benefits is too large to assess with a claim file review. As such, we have analysed the claims data to determine:

- The number (and proportion) of claimants with more than one injury or WPI assessment recorded.

  > For those with more than one assessment recorded we have reviewed and excluded those who appear to have duplicate records that aren't related to additional injuries or entitlements for benefits (for example those with multiple assessment for the same injury or administration records that are duplicated).

- For those claims with more than one injury we have determined the change in their total impairment assessment using individual versus combined scores. (For example, two assessments of 15 and 5 or a combined assessment of 19). This combining uses the relevant methodology as described in the Impairment Assessment Guidelines (i.e. it is not a straight summation of the individual assessments).

- We have then categorised these claims into three groups:
  - The number of claims that have already had their lump sum paid, but who had multiple WPI scores which would be combined under *Summerfield* if they were being assessed now. As for Serious Injury, we do not assess these claims as having a direct liability impact, but they are important for understanding impacts for more recent accident years.
  - Claims who have had multiple WPI assessments, but have not yet been paid. A high proportion of these claims have an open dispute.
  - Claims who have not yet commenced WPI activity. To estimate this, we take the total IBNR lump sum claims from the valuation and assume a proportion of these will have multiple injuries and so will be impacted by *Summerfield*.

It is worth noting that these claims do not represent an increase in the ultimate number of claims receiving a lump sum, rather these are claims that previously had their injuries separated which will now be combined, impacting the calculation of their lump sum entitlements.

Table 11.6 summarises the identification method for the potentially impacted claims. We have used the 2016-2018 accident years as the key period of analysis as these years had the most reliable information on impairment assessments and payments (noting that we could not reconcile payment information and recorded WPI scores for earlier periods, which were generally from a time before systems were updated to fully capture WPI assessment information).

Table 11.6 – Approach to estimating lump sum claims with multiple WPI assessments

WPI stage	Identified through	Identified by	Estimated as	Relevant for 2016-2018 AY OSC	Relevant for future year cost
Received NEL payment	NEL payment information and recorded WPI scores	Multiple WPI scores recorded	N/A	No	Yes
WPI score(s) recorded but no NEL payment	Recorded WPI scores	Multiple WPI scores recorded	N/A	Yes	Yes
IBNR NEL claims	Ultimate claims less segments above	N/A	IBNR NEL x proportion of IBNR NEL with 2+ WPI scores	Yes	Yes

Claims with Multiple WPI scores

The table below shows the outcomes for the first two segments in Table 11.6 as well as the assumed proportion of IBNR lump sum claims that will be impacted by *Summerfield*.

Table 11.7 – Lump sum claims split by number of WPI scores

AY	LS paid claims[1]				LS unpaid but WPI recorded				Assumed IBNR %
	1 WPI score	2+ WPI scores	Total	% 2+ WPI scores	1 WPI score	2+ WPI scores	Total	% 2+ WPI scores	
2014					11	8	19	42%	50%
2015					16	6	22	27%	50%
2016	727	63	790	8%	32	24	56	43%	50%
2017	701	38	739	5%	35	16	51	31%	45%
2018	707	16	723	2%	62	12	74	16%	40%

[1]Earlier paid claims for 2014 and 2015 AYs do not have WPI information accurately recorded

Table 11.11 highlights some interesting features in relation to claims with multiple WPI scores that are important when considering the overall number of claims impacted by *Summerfield*:

- Relatively few claims with multiple WPI scores have had payments for 2018 – only 2% of the paid lump sums for this accident year.
- The number of paid claims with multiple WPI scores recorded is around four times higher for 2016 than it is for 2018 (8% vs 2%).
- The proportion of claims that have multiple WPI scores recorded is much higher for unpaid claims, compared to paid claims.

This suggests that claims with multiple injuries are likely to have their WPI assessments later and so purely relying on the paid claims proportion of lump sum claims with multiple WPI scores recorded to estimate the impact of *Summerfield* would likely significantly understate the cost. This has been an important consideration in setting the proportion of IBNR lump sum claims that will be impacted by *Summerfield* by accident year.

Extrapolation across accident years

Combining the components described above, the potentially impacted Lump Sum claims are shown below in Figure 11.6.

Figure 11.6 – Estimated number of lump sum claims impacted by *Summerfield*

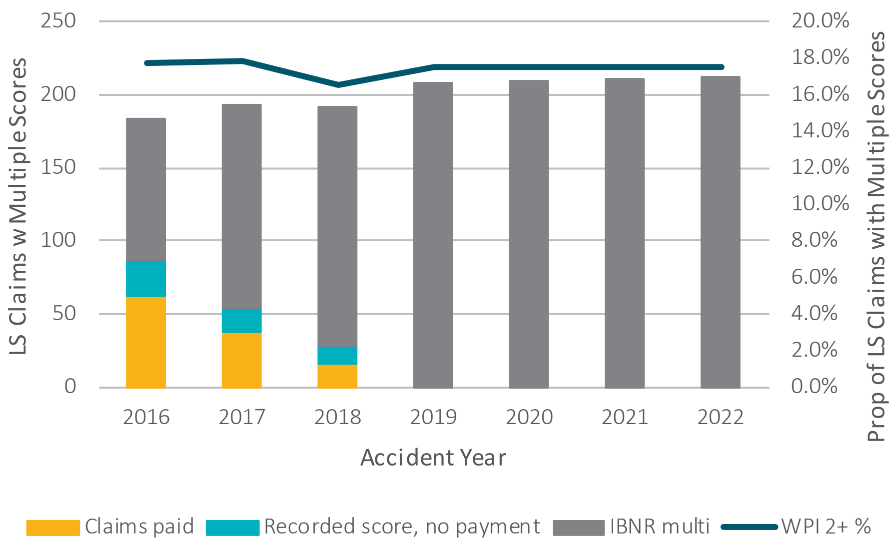


Figure 11.6 shows that around 17.5% of lump sum claims are expected to be impacted by *Summerfield*, which equates to around 200 claims per accident year.

11.4 Estimating the average size per impacted claim

In estimating the impact on the average size of claims, we have first considered Income Support and Treatment costs (relevant for those claims becoming serious injury) and Lump Sum impacts (relevant for all claim with combined assessments as per *Summerfield*).

11.4.1 Income Support and Treatment costs

Approach

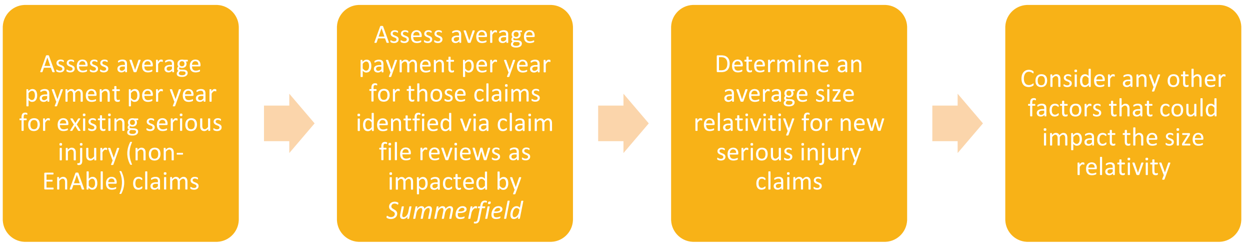
The table below describes our approach for estimating the impact on Serious Injury and Short Term claims for Income Support and Treatment.

Table 11.8 – Income Support and Treatment Average Size Approach

Benefit Package	Approach
Serious Injury	We have reviewed the average size assumptions of claims identified as being additional Serious Injury claims through manual reviews and compared to the current Serious Injury cohort. Where warranted, we have scaled the pre-*Summerfield* Serious Injury size to reflect these differences.
Short Term Claims	No assumed impacts. Having considered the need to allow for additional legal, medico-legal and investigation costs, we decided it wasn't necessary to add to the underlying projections as the behaviour of plaintiff law firms has already been focused on 'combining' for a number of years now anyway, and this has already been responded to as part of the existing valuation work.

Our approach for estimating this impact for Serious Injury claims is described below.

Figure 11.7 – Serious Injury average size framework



The key component is to take advantage of the valuation work already performed for pre-*Summerfield* Serious Injury claims, adjusting this for observable differences in payment profile for pre-*Summerfield* and *Summerfield* Serious Injury claims.

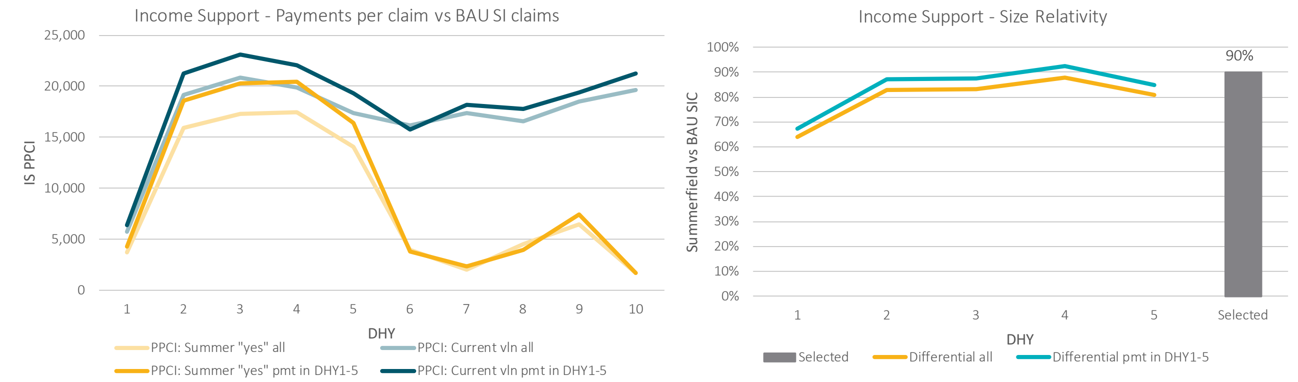
Income support

Figure 11.8 below shows the average income payments per claim for existing serious injury claims compared to those 160 claims identified via claim file reviews as likely serious injury as a result of *Summerfield*.

Figure 11.8 compares the average amount paid at each development half-year for claims reviewed as additional *Summerfield* Serious Injury claims from the 2014-2018 accident years, with BAU Serious Injury claims for the same accident period. We note that a higher than normal number of *Summerfield* Serious

Injury claims did not receive a payment in the first five development half-years, so we show the comparison both including and excluding claims that didn't receive an Income Support payment at these durations.

Figure 11.8 – Income Support size relativity analysis



Key characteristics of the payment profile include:

- *Summerfield* Serious Injury claims have a lower average Income Support payment amount up to development half year 5
- Payments beyond development half year 5 are significantly lower than the existing serious injury claims as a result of the RTW Act's cap on income benefits. As a result, it is not suitable to draw conclusions from this period of payments.

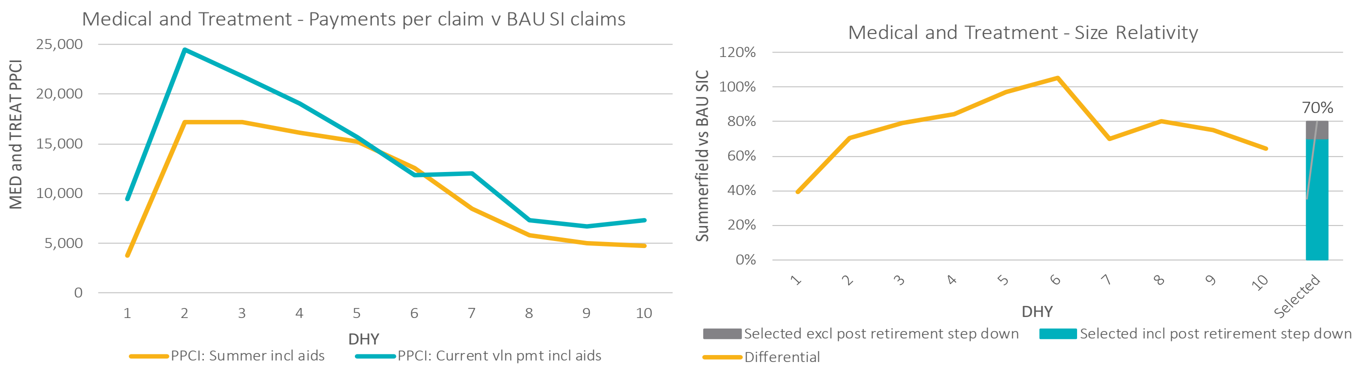
We have also reviewed the average age profile of the two groups of claims, and they are very similar. The duration of benefits to retirement age is therefore broadly equivalent, and we have not made any adjustment to average size based on differing age profiles of these two groups.

Overall, we have assumed that the average size for income support payments of these additional serious injury claims is 10% lower than the original serious injury group. This relates to a 10% reduction from payment differences and no reduction due to age profile differences.

Medical and treatment

Figure 11.9 below shows the average medical and treatment payments per claim for existing serious injury claims compared to those 160 claims identified via claim file reviews as likely serious injury as a result of *Summerfield*.

Figure 11.9 – Medical and Treatment size relativity analysis



Key characteristics of the payment profile include:

- Comparing the payment relativity for the first 4 development half years shows a cost relativity that is 20% or more lower than pre-*Summerfield* Serious Injury claims.
- We expect the increased relativity in periods 5 and 6 is due to claimants 'maximising' their medicals prior to their end of entitlement and therefore interpret this period as not being representative of the long-term differential in Medical and Treatment needs.
- Payments beyond development half year 6 are impacted as a result of the RTW Act's cap on medical benefits. As a result it is not suitable to draw conclusions from this period of payments.

As discussed in the Income Support section, there is no material difference in age profile and so we do not make any adjustments for differences in duration of payments.

Overall, we have assumed that the average size for Treatment payments for these additional Serious Injury claims is 30% lower than the original Serious Injury group. This relates to a 20% reduction from underlying payment differences, and a further 10% reduction due to assumed 'disconnection' from the scheme post retirement. There is no reduction due to age profile differences.

Total results – IS and Treatment

Table 11.9 shows the selected average size for the additional Serious Injury claims (excluding lump sums).

Table 11.9 – Average claim size by benefit type for additional Serious Injury claims

Benefit Type	Newly Seriously Injured
	$m
Income	0.6
Income Backpay	0.1
Medical/ Treatment	0.7
Total	1.3

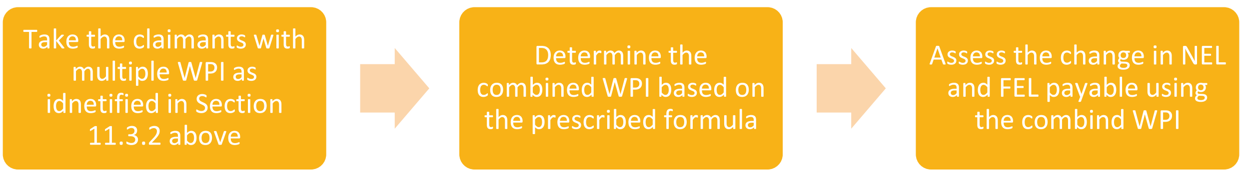
The average size increase for additional Serious Injury claims is $1.3m, excluding lump sums.

11.4.2 Lump sum costs

Approach

Figure 11.10 shows the approach taken to estimate the difference in average lump sum size as a result of *Summerfield*.

Figure 11.10 – Lump sum average size framework



In estimating the change in lump sum payments we have used the same data as for estimating the number of claims impacted. That is, claims with multiple WPI scores recorded from the 2016 to 2018 accident years. We have separated claims into three segments as per the table below, aligning with the change in lump sum benefits under *Summerfield*.

Table 11.10 – Lump sum average size approach

Seriously injured prior to Summerfield	New serious injury via Summerfield	Lump sum paid	Non-economic loss benefit impact	Future economic loss benefit impact
Yes	Yes	No	Claims estimated as having 2+ WPI receive a higher average payment	No
No	Yes	No	Yes, all claims receive higher amount	Yes, RTW Act claims lose FEL payment – this is a partial offset to their Serious Injury cost
No	No	No	Claims estimated as having 2+ WPI receive a higher average payment	RTW Act claims estimated as having 2+ WPI receive a higher average payment

Outcomes

Table 11.11 shows both the average original lump sum amount (from individual WPI assessments and injuries) and the additional cost due to combining WPI assessments.

Table 11.11 – Lump Sum impacts

	NEL new Act			FEL new Act			NEL old Act		
Segment	Original amount	Adjustment	Selected Adjustment	Original amount	Adjustment	Selected Adjustment	Original amount	Adjustment	Selected Adjustment
	$	$	$	$	$	$	$	$	$
Still SI	327,476	90,596	90,000	0	0	0	208,562	45,011	45,000
New SI	112,039	104,052	105,000	106,428	-106,428	-105,000	98,561	35,347	35,000
Still STC	48,195	7,789	8,000	35,969	50,466	50,000	45,811	3,116	3,000

As this shows, the additional NEL payment for claims who are or become a Serious Injury is significant, although there is an offsetting reduction for new Serious Injury claims who lose the FEL payment. For claims who can combine but still end up below the Serious Injury threshold (i.e. they remain as a Short Term Claim), there is a much higher additional FEL benefit than NEL, due to the higher scale on FEL benefits below 30% WPI.

11.5 Scenarios

As discussed earlier, in order to calculate the central estimate we have constructed four scenarios, each with a probability assigned to them. The probability weighted financial impact for all four scenarios forms our central estimate.

A high level summary is in Table 11.12. More details on how these scenarios translate to different numbers and average size impacts is discussed further below.

Table 11.12 – Scenario description

Scenario	Description
Nil impact scenario	ReturnToWorkSA is fully successful on appeal and the previous interpretation is re-established.
Low-range impact scenario	This assumes ReturnToWorkSA is partly successful on appeal or with subsequent mitigation strategies, which means fewer claims are impacted and/or the average size on impacted claims is lower than in the mid-range case.
Mid-range impact scenario	Findings from the file review work are extrapolated across the broader cohorts (which we are comfortable to do, given we had control of the sampling process that guided the file review work), and allowances are made for the estimated impact of different types of combination issues, before an additional 'actuarial best guess' IBNR is included.
High-range impact scenario	Behavioural responses from claimants and their advisors lead to additional claims being impacted over time. (NB: we note that scenario 4 is not intended to represent a maximum possible impact scenario)

11.5.1 Claim number assumptions and impacts

When considering the potential impacts across different scenarios we considered uncertainty around claim numbers across four broad categories:

1. The ability of ReturnToWorkSA to differentiate certain types of combinations of injuries from the circumstances of *Summerfield*. ReturnToWorkSA would then need to run successful legal arguments to prevent these claims from combining their injuries (and WPI scores) i.e. operational mitigation strategies. This is described as "*Summerfield* applies" in Table 11.13 below.
2. The adequacy of the additional IBNR allowance (from Section 11.5.1) This is described as "IBNR outside 'high risk' segments" in Table 11.13.
3. The potential for *Summerfield* to change claimant behaviours, as there are financial incentives to having a higher WPI score through combining injuries. This is described as "Behavioural impacts" in Table 11.13.
4. The potential for the data and processes used to understate the number of claims impacted. This is described as "Other impacts" in Table 11.13.

After detailed discussions with ReturnToWorkSA we understand that mitigation strategies may have an impact on the Category B claims only, however the level of success is uncertain (noting that there has been success with this in the past, as demonstrated by the *Mitchell* case). The distinction between Category A and Category B claims is therefore important when constructing the scenarios. We have allowed for this in the results presented by:

- We first determined a 'potentially impact additional serious injury' claim cohort, which did not distinguish between Category A and Category B claims.

- We then estimated the split between the categories – here we assume 50% Category A and 50% Category B (see Section 11.5.1).
- Our scenarios then consider (amongst other things) how the number of claims impacted under *Summerfield* varies, assuming different levels of success in mitigating the application of *Summerfield* to Category B claims.

Table 11.13 shows the assumptions used under each of those four categories for each scenario (we do not show the 'nil impact scenario' as by definition this has no additional *Summerfield* cost). We also show the assumptions underlying the 'potentially impacted claim cohort' derived in Section 11.5.1 above.

Table 11.13 – Claim number assumptions by scenario

Scenario	Potentially Impacted claim cohort	Low	Mid	High
Summerfield applies claims	Category A: 100% Category B: 100%	Category A: 100% Category B: 25%	Category A: 100% Category B: 75%	Category A: 100% Category B: 100%
IBNR outside 'high risk' segments	10%	5%	10%	20%
Behavioural impacts	Nil	Nil	Nil	Numbers impacted grows by 5% p.a. from 2018 level
Other impacts	Nil	Nil	Nil	Additional allowance for WPIs below 5% (which are not recorded) being combined, increasing claims impacted

Figure 11.11 shows the resulting additional Serious Injury claims under each scenario.

Figure 11.11 – Additional Serious Injury claims by scenario

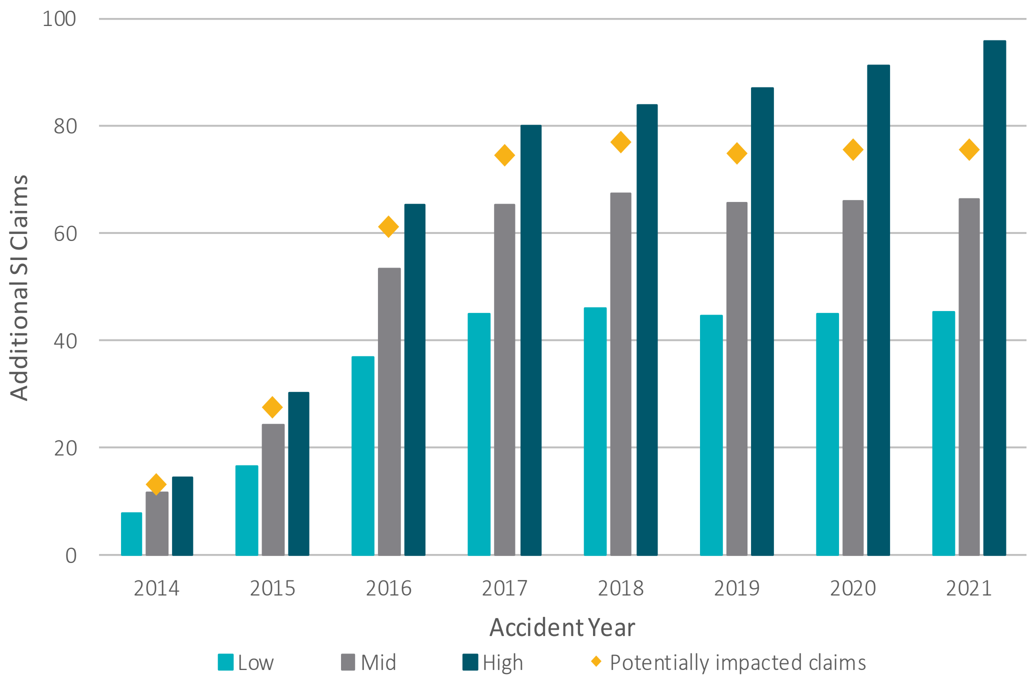
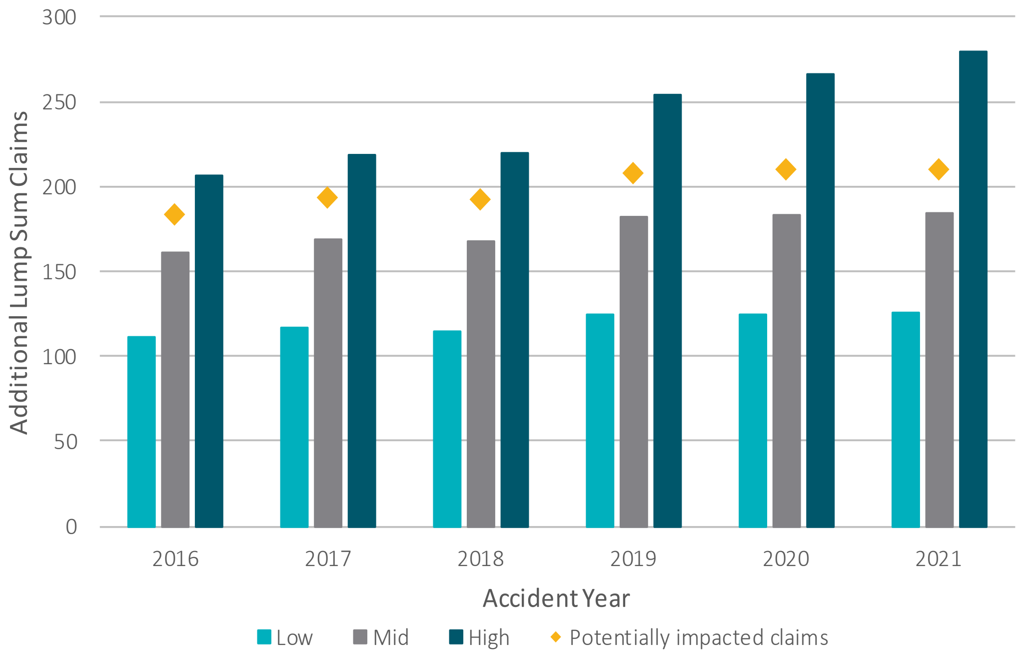


Figure 11.12 shows the number of lump sum claims impacted under each scenario.

Figure 11.12 – Lump sum claims impacted by scenario



11.5.2 Average size assumptions

Given the majority of the *Summerfield* cost comes from Serious Injury claims, we have limited the difference in average size assumptions across scenarios to considering how different the Income Support and Medical/Treatment needs for the additional Serious Injury claims looks compared to pre-*Summerfield* Serious Injury claims.

Table 11.14 shows our assumed Income Support and Medical/Treatment Serious Injury sizes relative to pre-*Summerfield* Serious Injury claims under each scenario.

Table 11.14 – Claim size assumptions by scenario

Scenario	Potentially Impacted claim cohort	Low	Mid	High
Income Support	90%	75%	90%	90%
Medical / Treatment	70%	60%	70%	70%

For the high scenario we didn't see that it was necessary to assume a higher average size, given the evidence to date on size differentials was quite conclusive. For the low scenario we have adopted 10-15% lower relativities on account of the potential for better RTW opportunities on this cohort and likelihood that some claims would cease claiming medical costs from the scheme once they passed retirement age (as we have previously seen in South Australia for less severe claims).

11.5.3 Scenario weights

In determining the likelihoods to apply to the different scenarios, our key considerations were:

- Prior to *Summerfield*, the provisions relating to WPI assessments had been more or less consistently applied since the RTW Act commenced – and importantly, this application was consistent with ReturnToWorkSA's interpretation of the Act. Whilst there were lower Court decisions against ReturnToWorkSA's interpretation and approach at times, once heard on appeal at the Full Court the key cases all substantially upheld ReturnToWorkSA's interpretation of the Act (prior to *Summerfield* that is).

- ReturnToWorkSA's view is that the decision of *Summerfield* is incorrect, and they continue to maintain this position in decision making and matters of review and appeal.
- Subsequent to the Full Court's *Summerfield* decision, ReturnToWorkSA has retained two separate QC's to review the decision and advise on the merits of different possible responses. In summary, both QC's provided reasons why an appeal to the High Court is warranted (as have a number of other senior legal practitioners in this field).
- Comparatively few cases receive a grant of special leave to appeal a case to the High Court. Further, given the case is essentially specific to South Australia it could be found that there is insufficient national significance for the High Court to hear the case. Counter to this argument are the significant financial consequences of the decision if it is not overturned, which may add to the likelihood of an appeal being heard.
- ReturnToWorkSA have recently been advised that they will be given an oral hearing in relation to their application for Special Leave to appeal to the High Court – that is, the first hurdle of 'review on the papers' has been overcome.
- Even if an appeal is heard, then ReturnToWorkSA still need to win the appeal case.

In light of the above, our adopted likelihoods for the four scenarios are discussed in Table 11.15 below.

Table 11.15 – Adopted probabilities

Scenario	Probability weighting	Reasoning
Nil impact scenario	33% (1 in 3 chance)	We adopted a 1 in 3 probability for this outcome, on the rationale that: - a 50:50 likelihood seemed too high, given difficulties in getting a case heard in the High Court, and then winning it. - a likelihood that was any lower than (say) 25% did not seem to give sufficient weight to the legal views, and initial decision by the High Court to give an oral hearing in relation to the application for Special Leave to appeal.
Mid-range impact scenario	33% (1 in 3 chance)	By construction, this is our actuarial 'best estimate' of the outcome if the Summerfield decision is maintained. Given it (1) has been developed based on actual claim outcomes, and (2) is deliberately not biased toward optimistic or conservative assumptions, we believe it should have a higher weight than the 'lower' and 'more adverse' scenarios where a difference to past outcomes is also anticipated. As such, it got half of the remaining likelihood.

'Lower impact scenario' and 'More adverse impact scenario'	17% each (1 in 6 chance)	Both of these scenarios involve changes to past observed claim outcomes, and so we see that they are lower likelihood than the mid-range scenario. On balance, we believe it is reasonable that we give broadly equal weight to the competing forces of 'potential adverse behavioural change' by claimants and their advisers in an attempt to maximise financial benefits, and the potential for 'mitigating strategies' by ReturnToWorkSA as it seeks to effectively prevent undue deterioration in claim outcomes.

11.5.4 Central estimate

Table 11.16 below summarises the results of our *Summerfield* work. Here the results incorporate the number of claims multiplied by the average size assumptions.

Table 11.16 – Results by scenario (inflated and discounted)

	No impact scenario	Lower impact scenario	Mid-range impact scenario	More adverse impact	Total
Additional Serious Injury claims	0	297	436	571	
Lump Sum claims impacted	0	808	1,182	1,622	
Central estimate - Serious Injury	\$0	\$398m	\$672m	\$882m	\$438m
Central estimate - Short Term Claims	\$0	-\$36m	-\$52m	-\$65m	-\$34m
Total Claims Cost	\$0	\$363m	\$620m	\$818m	\$404m
Claims Handling Expenses	\$0	\$25m	\$42m	\$56m	\$28m
Total Central Estimate	\$0	\$388m	\$663m	\$873m	\$431m
Assumed likelihood of scenario	33%	17%	33%	17%	

As this shows, the probability weighted central estimate is \$431m. The difference between the low and high scenario is almost \$500m, highlighting the uncertainty around the impact of *Summerfield*.

11.6 Additional cost due to *Summerfield*: Valuation results

The tables below show the *Summerfield* results by accident year and benefit type.

Table 11.17 – *Summerfield* results by accident year

	Injury Year	Summerfield Actuarial Release[1]	Summerfield Outstanding Claims Liability
		$m	$m
Transition Claims	To Jun-08	1	-1
	2008/09 to 2012/13	-35	35
	Jun-14	-11	11
	Jun-15	-23	23
RTW Act	Jun-16	-40	40
	Jun-17	-52	52
	Jun-18	-64	64
	Jun-19	-66	66
	Jun-20	-69	69
	Jun-21	-72	72
	Net Central Estimate	-431	431

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

The impact is greater for more recent accident years due to:

- Claims from older accident years being either closed, or already having received their lump sum claim, meaning they are low risk for *Summerfield*.
- An allowance for behavioural impacts to increase over time and impact more so for more recent accident years under the 'high' scenario.

12 Economic and other assumptions

12.1 Discount rate

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

12.1.1 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 target 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.

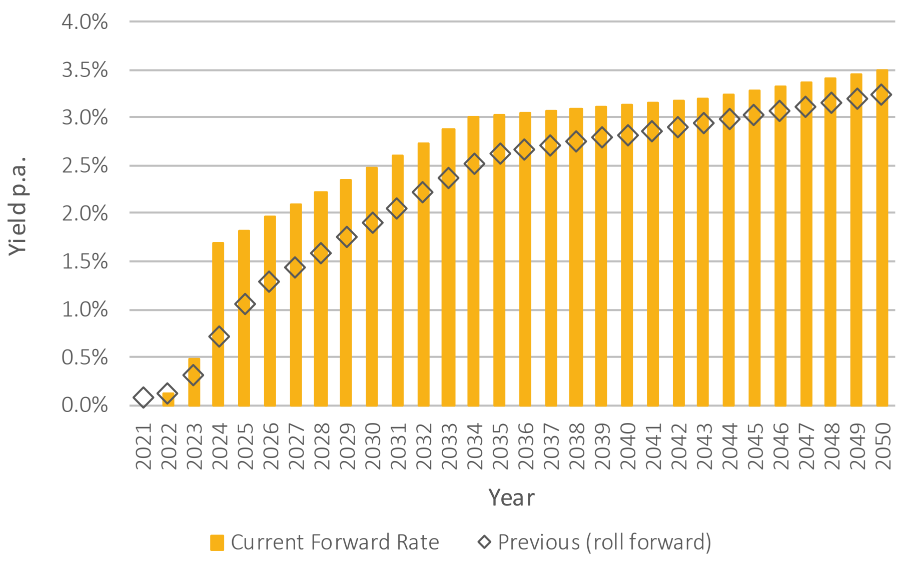
12.1.2 Current assumptions

Discount rates at June 2021 have generally increased from their positions at December 2020. A comparison of the currently adopted yield curve to previous is shown in Figure 12.1.

Maturities of less than three years have been the least affected, with RBA monetary policy decisions keeping yields for maturities out to three years low. Meanwhile, yields at medium to long terms have gone up by around 30 to 55 basis points (0.30% p.a. – 0.55% p.a.). We have assumed a long-term discount rate of 3.50%, an increase of 0.25% from our previous valuation, based on the increase observed in long term yields since December.

The equivalent single discount rate has increased from 2.0% p.a. at 31 December 2020 to 2.4% p.a. at 30 June 2021.

Figure 12.1 – Risk free forward rate vs previous valuation



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

12.2 Inflation

In setting our inflation assumptions we consider:

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

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

It is also important to note that the selected inflation assumptions are intended to reflect increases in claims cost over time, rather than being a pure forecast of the various inflation indices. This is important because there has been some short-term disruption to the levels of inflation in the economy as a result of the COVID-19 pandemic, an example of which is the 1.9% fall in CPI inflation for the June 2020 quarter and subsequent rebound due almost entirely to temporary childcare subsidies. We have only reflected these short-term disruptions to inflation indices in our selections where we believe this impact will actually flow on to inflation in the cost of claims, noting that the available inflation indices are a proxy.

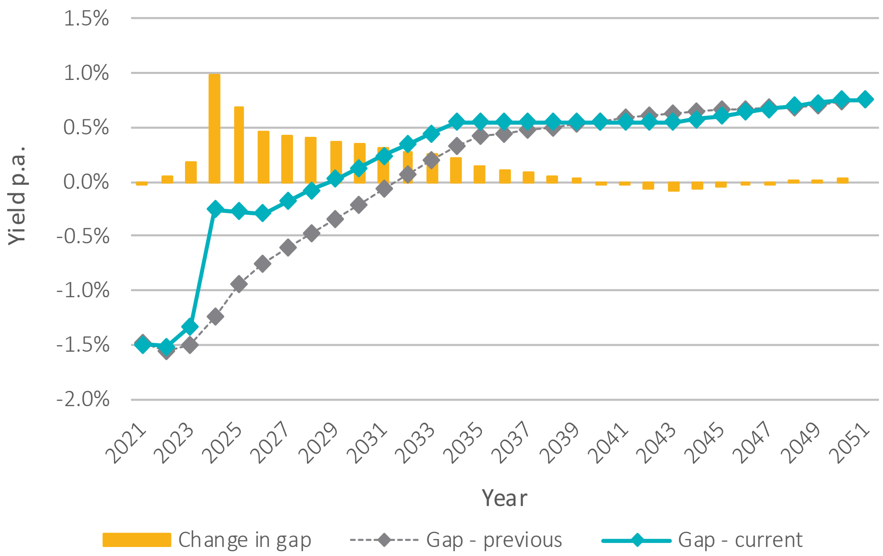
In summary, our assumptions at the current valuation are:

- Wage Price Index (WPI) inflation has been assumed to be 1.50% p.a. for the next year, increasing to 2.25% p.a. in five years' time. This is a slight increase from our previous assumption of an increase to 2.0% over the next five years.

- WPI inflation assumptions then increase slowly over the following 25-year period, after which they remain steady at 2.75% p.a. This long-term assumption represents a 0.75% p.a. gap between WPI inflation and forward discount rates, unchanged from our December 2020 valuation.
- Average Weekly Earnings (AWE) inflation is set as equal to WPI inflation for the coming five-year period.
- The gap between AWE and WPI inflation is then assumed to widen over the following ten years, after which it reaches a steady-state gap of 0.10% p.a. above WPI (i.e. long-term AWE inflation of 2.85% p.a.). This is in line with our gap assumption at the previous valuation, and reflects the low AWE growth in SA in recent years.
- CPI inflation has been set flat at 2.0% p.a. for all future years. At the previous valuation we adopted a lower CPI of 1.5% in the short term which reflected a reduction in market expectations and forecasts of short-term CPI. The long-term selection represents the lower bound of the Reserve Bank's targeted range of 2-3% p.a. and reflects the low CPI growth across both SA and Australia over recent periods.

The movements, compared to previous assumptions, in adopted inflation and discount rates have an impact on the 'gap' between inflation and discount rates, particularly at mid durations. This is shown in Figure 12.2 below. As this shows, the current economic assumptions imply a negative gap out to nearly 9 years, compared to around 12 years at the previous valuation.

Figure 12.2 – Gap between adopted AWE and discount rates



The net impact of these changes is a material reduction in the scheme liability, which is quantified in Section 13 below.

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.

12.3 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.

We have reviewed recent and budgeted expenses for ReturnToWorkSA to estimate the costs related to claims handling. Interpretation of this analysis must be conscious of the changing nature of the scheme, its claim management strategy and the expected permanency, or not, of these features; that is, the claims handling expense allowance is set as a forward looking measure that is intended to reflect the expense structure. Table 12.1 shows the scheme's recent and projected expenses and the proportion allocated to claims handling expenses (CHE).

Table 12.1 – Overall Scheme expenses and Proportion of cost allocated to CHE

	2019-20	2020-21 (unaudited)	2021-22 (budget)
	$m	$m	$m
Administration	57.4	54.8	62.5
Claims Management	54.8	66.1	70.4
Tribunal	8.8	8.7	9.1
Total Expenses	121.0	129.6	142.0

% Expenses allocated to CHE

	2019-20	2020-21	2021-22
Administration	27%	31%	32%
Claims Management	69%	68%	67%
Tribunal	55%	55%	55%
Total	48%	51%	51%

Table 12.1 shows the proportion of costs allocated to claims management in three main categories:

- Administration expenses – this includes the direct claims management costs of ReturnToWorkSA from its insurance team, plus a proportion of other cost centres.
- Claims Management – this includes the costs paid to external claim managers, with an allocation between new claims and ongoing claims management (including relevant performance fees).
- Tribunal – this is the estimated proportion related to ongoing claims, net of the contribution from self-insurers to these running costs.

In addition, costs are also split between serious injury and short term claims to enable a two way claims handling expense assumption. Table 12.2 shows the attributed claims handling expenses as a proportion of gross claim payments, which is how the claims handling expense loading is applied in the liability valuation.

Table 12.2 – Claims handling expenses by claim type as a percentage of gross claim payments

	CHE Expenses / Claim Payments - by financial year			CHE Assumption	
	2019-20	2020-21	2021-22	Selected	Previous
Serious Injury	8.5%	8.2%	7.6%	7.5%	8.0%
Short Term Claims	13.6%	15.7%	16.9%	15.5%	14.0%
Liability Weighted Average %				9.6%	9.6%

As shown in Table 12.2, the CHE costs associated with serious injury have been reducing over time, which corresponds to the period where ReturnToWorkSA has had a larger portfolio of serious injury claims to manage. This 'scale benefit' has led to a lowering of the serious injury CHE assumption.

Short term claims however have seen higher expense rates than previously assumed, which appears to be driven by the costs associated with managing the transition cohort and other claims past their Income Support and Medical boundaries. It is not expected that these features will change in the foreseeable future, given there are still many claims in dispute and finalising the run-off of the transition cohort still appears to be at least 2-3 years away, and so this recent experience is relevant for the CHE allowance. There have also been increases in mobile claim manager numbers which make up part of the higher Short Term Claim cost.

If the scheme reaches a point where claims are finalising faster, that is that claims are finalising more in line with the legislated scheme boundaries on income support and medical costs, then we would expect the expense costs to reduce and a lower expense rate to be likely.

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

12.4 GST recoveries

Entitlements are modelled net of GST (ITC) recoveries.

12.5 Risk margins

Since June 2017 ReturnToWorkSA has established its outstanding claims provision with a 75% probability of sufficiency. Our recommended claims provision is consistent with this reserving policy.

12.5.1 Pre-*Summerfield* risk margin allowance

We have undertaken a high-level review of the risk margin scorecards for internal and external systemic risks at this valuation, given a more comprehensive review was done two years ago. 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) – a measure of the variability in the statistical distribution – 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 12.3 below.

Table 12.3 – Coefficient of Variation (pre-*Summerfield*)

Risk Margin Group	Total CV Jun-21	Total CV Dec-20
Serious Injury	26.9%	27.9%
Short Term Claims		
Income Support	14.5%	13.4%
Lump Sums	23.0%	24.7%
Legal + Investigation	28.0%	28.0%
Medical and Other Treatment	15.8%	14.8%
Recoveries	20.0%	20.0%
Total (Undiversified)	25.2%	25.9%
Total (Diversified)	**21.7%**	**22.3%**
Diversification	14.0%	13.9%

Our selected CVs have decreased slightly overall compared to the previous valuation with the variations being:

- An increase in the Income Support CV due to higher parameter selection error as a result of the recent growth in new Income Support claim numbers and uncertainty around the duration of active dependant benefit claims.
- A decrease in the Lump Sums CV due to lower parameter selection error as there are now six years of RTW Act experience.
- An increase in the Medical and Other Treatment CV due to higher uncertainty in parameter selection and specification error. This is mostly due to higher numbers of hearing loss claims resulting in greater uncertainty around medical appliance and assessment costs, which can have a very long tail.
- A lower CV for Serious Injury Claims due to lower specification error as there are an increasing number of years of post RTW Act experience. While the claim number risk remains very high, there are some indications that life expectancy may be lower than has been assumed which, if true, would mean our average sizes are higher than needed.
- A slightly higher diversification benefit, as the contribution of Serious Injury claim segment to the risk margin is lower due to a lower CV.

Based on a diversified coefficient of variation of 21.7% and our modelled distribution (which is a blend between a normal and lognormal distribution), we recommend a risk margin of 13.9% at a 75% probability of sufficiency. This compares with 14.1% adopted at the previous valuation.

12.5.2 Risk margins – *Summerfield* valuation

To determine the risk margin related to the *Summerfield* allowance we have used the scenarios described in Section 11.5 to inform how much additional reserves are required to meet the required 75% probability of sufficiency.

The result of this is that we believe the post-*Summerfield* risk margin needs to cover the full cost of the mid-range scenario, noting also that the more adverse impact scenario has an assumed probability that puts it above the 75th percentile.

In determining the required risk margin we have also considered the amount of 'Serious Injury claim number risk' that was already included in the baseline risk margin – that is, given the majority of the claims that would become additional Serious Injuries under *Summerfield* are the same group who contribute to the baseline level of Serious Injury claim number uncertainty, we believe it would be double counting if we were to add the full additional cost on top of the existing baseline risk margin. This is why the overall Summerfield provision ($584m) ends up lower than the mid-range impact scenario

($663m), i.e. we have allowed for around $80m to have already been included in the $436m pre-*Summerfield* risk margin.

This results in a much higher percentage loading than the normal risk margin, 35.4% of the central estimate compared to 13.9% for the pre-*Summerfield* risk margin, which we believe is appropriate given the unique circumstances presented by this case at the current time.

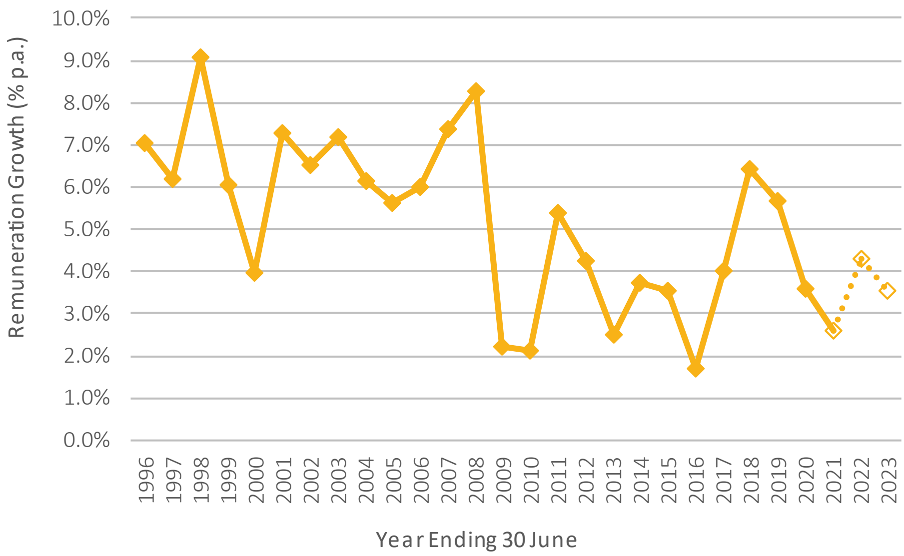
12.6 Non-exempt remuneration

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 12.3.

Figure 12.3 – Non-exempt leviable remuneration: annual growth



We have adopted ReturnToWorkSA's remuneration projection of $32.1 billion for 2020/21, noting that it is still subject to estimation. The key features we note in the remuneration experience are:

- The remuneration growth for 2009 and 2010 was the lowest seen since the early 1990's (the time of the last significant recession in Australia). There were two key contributors to this experience:
  - The global financial crisis (GFC) – during 2009 unemployment rates were higher than for the previous few years, and the level of under-employment (people working fewer hours than they would like) also rose. The level of wage inflation also reduced in the year.
  - A change in the definition of leviable remuneration from 1 July 2008, to exclude wages for trainees and apprentices (noting that while their wages are excluded, their claims costs are not). This change to the remuneration base reduced remuneration estimates for 2008/09 by about 2% relative to the previous definition.

- Despite remuneration growth briefly heading up to more 'normal' historical levels in 2011 and 2012, wage growth then reduced again towards levels seen during the GFC, and then stayed low until 2017.
- 2019 remuneration growth ended up at 5.7%, following on from 6.4% growth in 2018. Both of these years had higher growth than any other year all the way back to 2008.
- The remuneration growth for 2020 ended up at 3.6%, much higher than was projected at June 2020. This reflects a smaller than anticipated impact from COVID-19 on employment in South Australia, in part due to the JobKeeper support scheme provided by the Australian government.
- The current projections have lower wage growth in 2021, with 2.6% growth, rising to 4.3% in 2022 and 3.5% after that. The forecast of wages growth for 2021 includes the expected impact of phasing out of the JobKeeper program, as well as a fast recovery from COVID-19 for the South Australian economy.

13 Valuation results

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

- The central estimate of outstanding claims as at 30 June 2021
- 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 2021 and 30 June 2022
- Reconciliation of results with 31 December 2020 projections.

13.1 Outstanding claims – central estimate

Our central estimate of the outstanding claims by entitlement type as at 30 June 2021 is set out in Table 13.1. This liability relates to all claims that occurred on or before 30 June 2021 and includes the impact of updated economic assumptions.

Table 13.1 – Outstanding claims by entitlement type

Entitlement Group	Short Term Claims	Serious Injuries	Additional cost due to Summerfield	Total	% of Net Cent Est
	$m	$m	$m	$m	
Income	167	596	178	941	26%
Medical	152	691	120	963	27%
Other (incl. Care)	7	426	28	462	13%
Lump sums	316	126	26	469	13%
Hospital	17	146	26	189	5%
Travel & Accomodation	5	57	12	74	2%
Worker legal	51	16	0	67	2%
Corporation legal	40	16	0	56	2%
Physical Therapy	10	48	9	67	2%
Rehabilitation	12	19	3	34	1%
Investigation	2	1	0	3	0.09%
Common law	1	0	0	1	0.04%
Commutation	2	0	0	2	0.06%
LOEC	1	0	0	1	0.02%
Gross Liability	785	2,142	404	3,331	93%
Recoveries	-36	-36	0	-72	-2%
Expenses	122	161	28	310	9%
Net Central Estimate	871	2,267	431	3,569	100%

The outstanding claims liability before recoveries and expenses is estimated to be $3,331m. The net central estimate, allowing for recoveries and including an allowance for claims handling expenses, is $3,569m.

Table 13.2 details the outstanding claims result by accident year.

Table 13.2 – Outstanding claims by accident year

Accident Year	Short Term Claims	Serious Injuries	Additional cost due to Summerfield	Total	% of Net Cent Est
	$m	$m	$m	$m	
Pre Jun-05 Years	19	225	-0	243	7%
Jun-06	3	40	-0	43	1%
Jun-07	4	61	-0	65	2%
Jun-08	5	42	-0	47	1%
Jun-09	5	37	-0	42	1%
Jun-10	6	83	19	108	3%
Jun-11	7	74	4	85	2%
Jun-12	8	85	4	98	3%
Jun-13	10	104	7	121	3%
Jun-14	12	97	10	119	3%
Jun-15	15	156	21	192	5%
Jun-16	26	135	38	199	6%
Jun-17	40	173	49	262	7%
Jun-18	56	209	60	325	9%
Jun-19	91	225	62	377	11%
Jun-20	173	193	64	431	12%
Jun-21	305	204	67	576	16%
Gross Liability	785	2,142	404	3,331	93%
Recoveries	-36	-36	0	-72	-2%
Expenses	122	161	28	310	9%
Net Central Estimate	871	2,267	431	3,569	100%

We note that for reasons of pragmatism the Summerfield allowances have been applied in a simplified way for the very old accident years, which produces the large allowance in the Jun-10 accident year and small negatives in the earlier history.

Table 13.3 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 13.3 – Impact of discounting

	Short Term Claims	Serious Injuries	Additional cost due to Summerfield	Total
	$m	$m		$m
Inflated	906	4,067	766	5,739
Inflated and Discounted	871	2,267	431	3,569
Ratio	96%	56%	56%	62%

13.2 Provision for outstanding claims

Table 13.4 sets out the components of our recommended provision at 75% probability of sufficiency, $4,157m. As explained in Section 12.5, the recommended risk margin after allowing for the impact of *Summerfield* has been increased from 14.1% to 16.5% of the central estimate liability.

Table 13.4 – Recommended balance sheet provision

	Baseline Valuation	Additional cost due to Summerfield	Total
	$m	*$m*	*$m*
	(a)	*(b)*	*(a+b)*
Gross Claims Cost - Serious Injuries	2,142	438	2,580
Gross Claims Cost - Short Term Claims	785	-34	751
Claims Handling Expenses	282	28	310
Gross Outstanding Claims Liability	3,210	431	3,641
Recoveries	-72	0	-72
Net **Central Estimate** of Outstanding Claims Liability	3,137	431	3,569
Risk Margin	436	153	589
Recommended Provision	3,573	584	4,157

13.3 Movement in liability

Our net central estimate including CHE is $461m higher than projected at the previous valuation, as shown in Table 13.5.

Table 13.5 – Movement from previous valuation

	Gross	Recoveries	CHE	Net
	$m	$m	$m	$m
Liability as at Dec-20	2,841	-69	273	3,045
Plus liability for claims incurred in the period	292	-7	35	321
Less Expected Payments to Jun-21	235	-7	31	259
Plus Interest (unwinding of discount)	1	0	0	1
Liability Projected from Previous Valuation	2,899	-69	278	3,108
Current Valuation	3,331	-72	310	3,569
Difference	432	-3	32	461

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.
- Movement in liability due to additional cost from *Summerfield*.
- 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 performance relative to the previous valuation.

Table 13.6 – Movement in central estimate and determination of actuarial release

	Liability Estimate[1]	AvE Payments in 6 mths to Dec-20	Actuarial Release/ (Strengthening) [2]
	$m	$m	$m
Liability at Dec-20 Valuation	3,045		
Projected Liability at Jun-21 (from Dec-20 valuation)	3,108		
Claims Movement - Short Term Claims	42	-14	-29
Claims Movement - Serious Injury	78	2	-80
Impact of Change in economic assumptions	-91		
Impact of additional cost due to Summerfield	431		-431
Recommended Liability at Jun-21	3,569		
Total Actuarial Strengthening			-540

[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.

13.3.1 Actuarial release at June 2021

The actuarial strengthening (negative release) over the period is $540m. Table 13.7 shows the actuarial strengthening by entitlement type.

Table 13.7 – Actuarial release/(Strengthening) by Entitlement Type

Entitlement Group	Short Term Claims[1]	Serious Injury Claims[1]	Additional cost due to Summerfield	Total Actuarial Release [1]	Release %
	$m	$m	$m	$m	
Income Support	-1.4	-43.4	-178.2	-222.9	-30.4%
Lump Sums	1.2	-12.9	-26.4	-38.1	-8.9%
Worker legal	-4.7	-0.7	0.0	-5.4	-8.5%
Corporation legal	-3.8	-0.4	0.0	-4.2	-8.1%
Investigation	0.2	0.0	0.0	0.2	4.9%
Medical	-12.2	-1.5	-120.4	-134.1	-15.6%
Other	0.4	-12.6	-28.4	-40.6	-9.2%
Hospital	1.8	-9.7	-26.0	-33.9	-21.2%
Travel	0.3	2.0	-11.9	-9.6	-14.4%
Physical therapy	0.7	-3.4	-9.1	-11.8	-20.6%
Rehabilitation	-0.1	1.1	-3.2	-2.2	-6.9%
Common Law	0.1	0.0	0.0	0.1	7.0%
LOEC	0.0	0.0	0.0	0.0	-2.2%
Commutation	0.2	0.0	0.0	0.2	10.8%
Gross Liability	-17.2	-81.4	-403.7	-502.2	-17.3%
Recoveries	4.6	-3.6	0.0	1.0	-1.4%
Expenses	-15.9	4.6	-27.6	-38.9	-14.0%
Net Central Estimate	-28.5	-80.4	-431.2	-540.1	-17.4%

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

The major factors contributing to the $540.1m actuarial strengthening at the current valuation are:

- The **impact of *Summerfield* allowance** resulted in an increase of $431m as discussed in Section 1.8.2 above.
- For **Short Term claims** there is an actuarial strengthening of $29m, which is the result of:

> An increase of $16m for claims handling expenses. A key driver of this is the costs still being incurred for the management of claims that are now well beyond the two year Income Support boundary (and particularly so for transitional claims).

> An increase of $15m in relation to the growth in Hearing Loss claims. This is spread across a number of entitlement groups: Lump Sums ($6m of extra cost), Medical (around $8m of extra cost, mostly for hearing aids, but also for additional medico-legal assessment) and additional Legal costs.

> Transitional claims continuing to cost more than expected, due to the slow runoff and continuation of new disputes and new WPI assessments. This added $7m to the liability across Lump Sums, Legal costs and medico-legal assessment costs.

> Income Support costs increased by $1m overall, due to a combination of:

  - Improved RTW rates leading to a saving of $10m
  - Higher numbers of claims commencing Income Support partly offsetting this with a $6m increase
  - Increased allowances for the cost of long term dependent benefits increasing the liability by $5m.

> A release of $5m for recoveries (i.e. an increase in the recoveries asset), reflecting the continued levels of higher recoveries being received.

> A release of $5m for the non-hearing loss components of Lump Sum entitlements. This is due to a lower assumed number of claims entitled to an Economic Loss lump sum.

- For **Serious Injury claims** there was an actuarial strengthening of $80m due to:

> Higher claim numbers (including IBNR assumptions) resulted in a strengthening of $81m. This strengthening is in response to the continued late emergence of Other Serious Injury claims for 2017 and prior accident periods and already very high claims for the 2018 year.

We caution that, even after including this strengthening, there is still only a very small allowance for remaining ongoing claims to ultimately reach the Serious Injury boundary. Compounding this risk, there continues to be a much larger than expected number of long duration claims still commencing WPI assessments, lodging new disputes and remaining active in the system. Further, we continue to interpret the higher numbers of Serious Injury claims being identified at early durations for recent accident years as a speed-up in the identification pattern, meaning we have not allowed for the late identifications that have been occurring on older accident years to continue for more recent accident cohorts. If either of these assumptions do not hold, there will be material implications for both the outstanding claims liability and average premium rate.

> A reassessment of the claims handling expenses loading resulted in a release of $5m. As the size of the Serious Injury cohort has grown, additional scale benefits are being achieved and this has led to a lowering of the CHE rate from 8.0% to 7.5%.

> Other basis changes were minor overall, and resulted in a strengthening of $2m. This, and actual payments being $2m higher than expected, explain the remaining difference.

13.3.2 Impact of economic assumption changes

Changes to inflation and discount rate assumptions decreased the net central estimate by $91m.

Overall, the gap between discount and inflation rates has increased compared to what was adopted at the December 2020 valuation. The main contributor to the decrease in liability is an increase in the yield curve at mid to longer durations.

The current assumptions imply a negative real yield (i.e. projected wage inflation above the discount rate) out to around nine years into the future.

13.4 Historical scheme costs

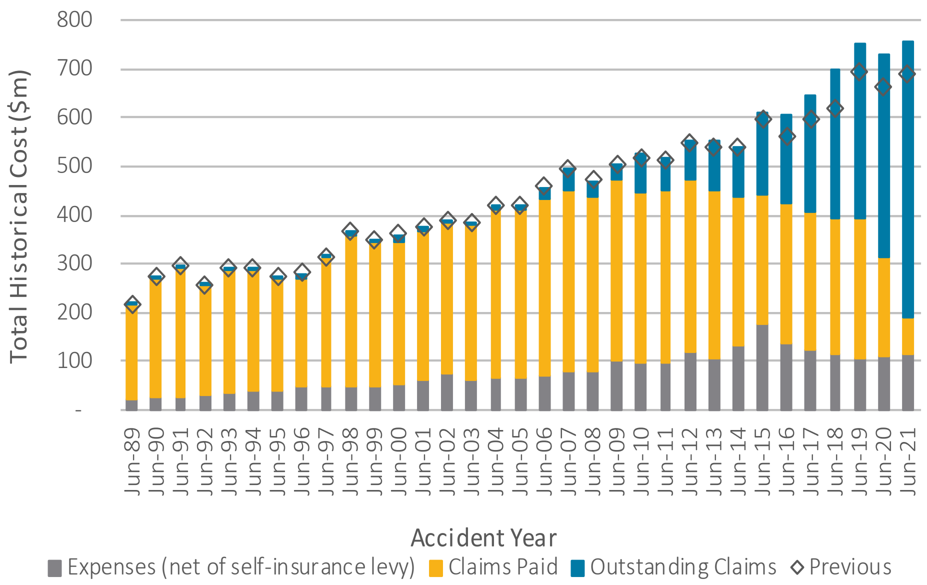
As part of our valuation we have estimated the 'historical cost' for each past accident year. This represents our estimate of total projected costs for the accident year, including expenses, and is discounted to the start of the accident year. Historical claims handling, operating expense and self-insurer levy figures are taken from ReturnToWorkSA's published annual accounts and the latest information from ReturnToWorkSA for 2021.

Figure 13.1 summarises the currently estimated historical costs for each year since the scheme began. As this shows, commencement of the RTW Act had initially acted to contain the cost for accident years up to 2016 at around $600m, breaking the strong upward trend seen in the lead up to that time. Scheme expenses were particularly high in 2015 as a result of additional transition related costs. The hindsight cost estimate has now increased significantly for the RTW Act periods reflecting the additional cost of *Summerfield* on Serious Injury claims.

For recent accident years the costs are projected to be higher than the pre-2016 level as a result of:

- Higher claim numbers, particularly for Income Support claims, combined with a period of deterioration in RTW outcomes.
- Growth in the number of Serious Injury claims that are expected to ultimately emerge.
- A greater cohort of claims which may be impacted by *Summerfield*.
- For 2019 there were also a number of very high cost claims in the Severe Traumatic Injury cohort. This dynamic makes the increase from 2018 to 2019 more pronounced than it would otherwise be and is not an indication of deterioration in experience; rather it is just a reflection of the volatile nature of severe traumatic claim numbers given the low volume. 2020 currently has no Severe Traumatic Injury claims, which is part of the reason its costs are lower than for 2019.

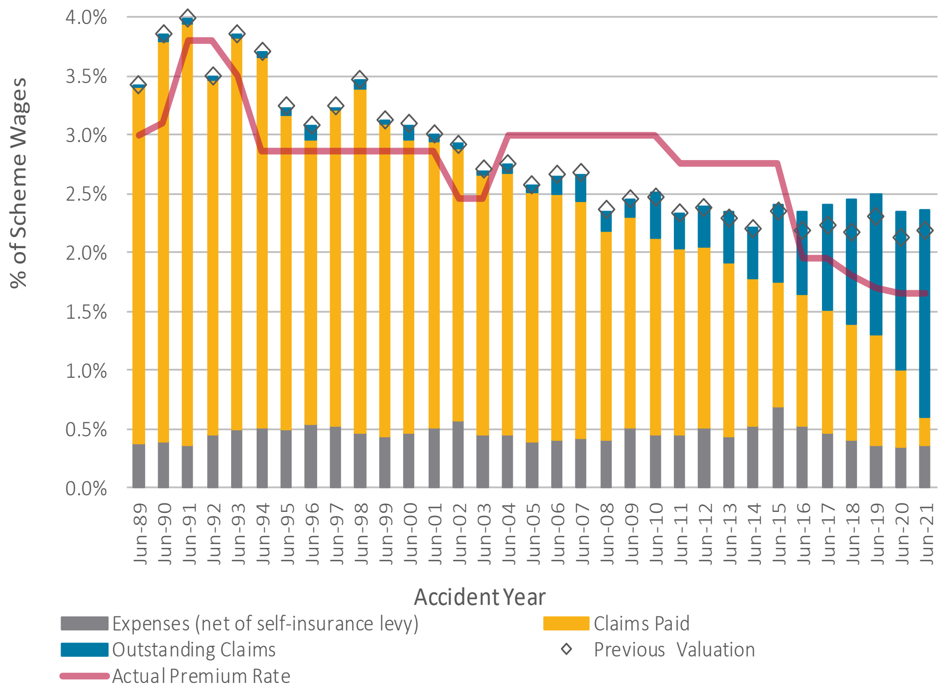
Figure 13.1 – Historical cost discounted to accident year



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 13.1) by the total scheme leviable remuneration in that year (discussed in Section 12.6). 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 13.2 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 13.2 – Break even premium rate and actual premium rate charged



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

The main points to note are:

- The introduction of the RTW Act reduced the BEP for accident years between 2008 and 2010 to just under 2.5% of wages.
- For accident years between 2011 and 2014 the costs were progressively lower again, as claims had less opportunity to remain on long term benefits.
- The impact of *Summerfield* pushes the 2016 and later BEP estimates to be in line with pre-RTW Act periods, eroding much of the savings introduced with the reforms.

  Importantly, the *Summerfield* impact that is included here is based on the valuation central estimate, which includes an allowance for the potential of a 'nil cost' outcome – so, if ReturnToWorkSA lose the High Court appeal then the BEP costs will most likely be even higher than is currently shown.
- The 2019 year is developing as a high cost year, due to a combination of high Income Support claim numbers, poor early RTW outcomes and a higher than normal Serious Injury cost (due to a number of very expensive Severe Traumatic Injury claims). The BEP estimates for 2020 and 2021 are lower than the 2019 BEP, due to fewer Severe Traumatic Injury claims.

- The current estimate of the BEP (using risk free rates) for the 2021 accident year is 2.35% of wages, up from 2.19% at the December 2020 valuation. Most of this increase is due to the additional cost of *Summerfield*. In terms of the components:
  - The allowance for *Summerfield* increases the BEP by an additional 0.21% of wages.
  - Pre-*Summerfield*, Short Term claim costs are projected to be 0.01% of wages lower than at the previous valuation.
  - Pre-*Summerfield*, Serious Injury costs are unchanged, with the impact of higher claim numbers being offset by the impact of higher discount rates.
  - Scheme expenses reduced by 0.03% of wages.

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

We emphasise that (as seen in the graph) the BEP estimates for recent accident years include a significant outstanding claims estimate and are therefore likely to change as experience emerges. Compounding the uncertainty is the impact of *Summerfield* which is subject to a high degree of estimation and uncertainty about the ultimate legal outcomes that will eventuate. We also note that the adopted wages figure for 2021 still involves a degree of estimation.

13.5 Future cash flows

Table 13.8 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 13.6, but make no allowance for expenses. Because the Summerfield impacts have been assumed to commence in 12 months' time (i.e. that is the expected time until the appeal result will be known and then implemented), there is additional to normal cost after June 2022.

Table 13.8 – Projected cash flows

Entitlement Group	Projected Cashflows for Period			
	Jun-21 to Dec-21	Dec-21 to Jun-22	Jun-22 to Dec-22	Dec-22 to Jun-23
	$m	$m	$m	$m
Income Support	86.6	86.1	117.3	93.7
Medical	43.8	41.2	44.8	44.1
Lump sums	49.3	57.7	89.9	70.7
Rehabilitation	5.4	5.0	5.1	5.1
Physical Therapy	6.2	5.8	6.1	6.0
Hospital	10.8	10.2	11.1	10.9
Legal - Non-Contract	8.5	8.5	8.4	8.3
Other	7.8	7.7	9.0	8.9
Legal Contract	11.6	11.6	11.5	11.3
Travel	3.0	2.8	3.1	3.1
Investigation	1.1	1.1	1.1	1.1
Commutation	0.2	0.2	0.2	0.2
LOEC	0.1	0.1	0.1	0.1
Common law	0.1	0.1	0.1	0.1
Recoveries	-9.3	-9.2	-12.2	-6.5
Net Claims Cost - Total	225.2	228.9	295.6	257.2
Serious Injuries (net)	38.7	45.6	108.2	67.6
Short Term Claims (net)	186.4	183.4	187.4	189.6

Cash flows for Short Term claims over the next two years are expected to remain fairly stable, while the shape to the Serious Injury cashflows is a result of assumptions around the timing of one-off lump sums and recoveries, before *Summerfield* impacted claims are anticipated to commence in December 2022 half year.

13.6 Projected outstanding claims

Table 13.9 shows the outstanding claims projected to 31 December 2021 and 30 June 2022. We note the payments shown here are based on those in Table 13.8, but also include an allowance for claims handling expenses for consistency with our liability estimate.

Importantly, we note that these projections are based on the current central estimate allowances, and that it is very likely that the actual outcome will be different to this as: (1) the outcome of the *Summerfield* High Court appeal is known, and (2) more information about the impacts of *Summerfield* emerges over time.

Table 13.9 – Projected outstanding claims provision

(31 December 2021 and 30 June 2022)

	Half year ending	
	Dec-21	Jun-22
	$m	$m
Provision at Period Start	4,157	4,298
Less Risk Margin	589	609
Central Estimate at Period Start	3,569	3,689
Plus Additional Liability Incurred in Period	379	381
Less Expected Payments in Period	-258	-262
Plus Interest (unwind of discount)	0	0
Projected Central Estimate at Period End	3,689	3,808
Plus Risk Margin	609	628
Projected Provision at Period End	4,298	4,436

We project the central estimate for the net outstanding claims liability at 31 December 2021 to be $3,689m; 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 2021 to 31 December 2021. The corresponding provision at a 75% probability of sufficiency is $4,298m.

The projected increase to 31 December 2021 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.

13.7 Reconciliation of incurred cost with previous projection

At the 31 December 2020 valuation we projected an additional claim cost liability of $286m would be incurred from claims arising in the half-year to 30 June 2021. Our current projection for the ultimate value of this liability is $323m, an increase of 13.1% or $37m consisting of:

- An increase of $33.5m from the additional cost of *Summerfield*.
- An increase of $5.4m from Short Term Claims primarily due to higher than expected hearing loss claim numbers and increase in new Income Support claims.
- An increase of $2.8m from 'Pre-*Summerfield*' Serious Injury claims, primarily due to increases to the expected number of Other Serious Injury claims.
- Changes to economic assumptions take away $4.4m.

Table 13.10 – Comparison of June 2020 projections to current valuation

For period 1 Jan 2021 to 30 Jun 2021		
Incurred Claims Liability ($m, excl. expenses):		Difference
Projected in Dec-20 Valuation	286	
Incurred (current valuation)	323	13.1%

14 Uncertainty and sensitivity analysis

14.1 Risk and uncertainty

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

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

We have considered the uncertainty in four broad categories:

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

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

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

14.2 Economic scenarios

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

Table 14.1 – Economic Scenarios

	Stronger	Weaker
Wage inflation[1]	3.0% pa	2.0% pa
Investment earnings	4.0% pa	0.0% to 1.0% pa
Real Long-term 'Gap'[2]	1.0%	-1.0%

[1] Wage Price Index (WPI) inflation, [2] Difference between WPI inflation and discount rate

The impact of these alternative economic assumptions is shown below.

Table 14.2 – Economic sensitivities

	OSC Impact	
	$m	%
30 Jun 21 OSC estimate (Including risk margin at 75% POS)	4,157	
Stronger Economic Scenario (1% gap between inflation and discount rate)	-569	-14%
Weaker Economic Conditions (-1% gap)	+916	+22%
Updated Yield Curve (31 Jul 2021 Yield Curve)	+123	+3%

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; for example, in the strong scenario the discounted liabilities reduce by over $500m. Of course, conditions can also move the other way, as they did during the July month with yields dropping around 20-30bps; if we updated the valuation to the July yield curve, this alone could increase the liabilities by $120m (noting that we have not considered whether the inflation assumptions would also need to change in constructing this sensitivity).

The very high discounted mean term of the liabilities means economic impacts have a very leveraged impact on the liabilities.

14.3 Legal risk scenarios

As discussed in Section 4, there are currently high numbers of disputes in the scheme and the duration of open disputes is high. Further, a number of key provisions of the RTW Act are still subject to new areas of legal challenge, and the outcome of the *Summerfield* appeal has the potential to move the scheme's liabilities by many hundreds of millions of dollars.

The table below indicates the sensitivity of the results to scenarios regarding disputes around WPI assessments. It is likely that if the legal environment is either better or worse than we have implicitly assumed, then several experience changes could happen together.

Table 14.3 - Legal sensitivities

	OSC Impact	
	$m	%
30 Jun 21 OSC estimate (Including risk margin at 75% POS)	4,157	
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.	+496	12%
Summerfield - upper scenario	+406	+10%
Summerfield - nil impact scenario	-584	-14%

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

On the other hand, if the pre-Summerfield legal interpretation is re-established then there would be a saving of hundreds of millions of dollars relative to the current provision.

14.4 Expenses scenario

The adopted claims handling expenses have been adjusted at this valuation and allow for the current level of expenses to be maintained over the lifetime of the projection. If this is not the case, then the loading could be tens of millions higher as shown below.

Table 14.4 – Expenses sensitivities

	OSC Impact	
	$m	%
30 Jun 21 OSC estimate (Including risk margin at 75% POS)	4,157	
Scheme expenses are higher than allowed (16.5% for STC and 8.5% for Serious Injuries)	+39	+1%

14.5 Short term claim scenarios

The implementation of the RTW Act brought significant change to the scheme and areas of change in the scheme's culture. In the last one to two years there have been areas of claim outcomes where these improvements might not be being maintained (for example dispute numbers have grown over time), and 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 could outperform current projections if more favourable changes in claims management and behaviour of scheme participants can be achieved.

Table 14.5 summarises a number of sensitivities that help demonstrate the potential for variability in the Short Term Claim cohort.

Table 14.5 – Short term claim sensitivities

	OSC Impact	
	$m	%
30 Jun 21 OSC estimate (Including risk margin at 75% POS)	4,157	
Claim numbers		
Hearing Loss numbers continue to deteriorate at current levels for the foreseeable future	+22	+1%
Income Support		
Deterioration in Continuance rates by 5% points at each development quarter and associated percentage change in PPACs	+53	+1%
Front end IS continuance rates return to the best of recent experience in last 5 years	-16	-0%
Treatment costs		
Late surgery costs emerge more than expected, approximately double the current allowance	+26	+1%
Medical costs in the tail emerge similar to recent experience due to higher medico legal costs for RTW Act injuries	+34	+1%
Legal fees		
Reductions in dispute costs under the RTW Act are lower than allowed for	+27	+1%
Higher average cost of legal fees for all claims due to disputes progressing further in the disputation process	+42	+1%
Lump Sums		
First Paid and Economic Loss lump sum numbers reduce to 2015 levels for RTW Act claims	-66	-2%
Economic Loss lump sum sizes emerge 10% higher than expected	+19	+0%
Transitional lump sum disputes and assessments continue to run at a high volume for the next three years	+11	+0%
A higher than assumed proportion of claims do not get an EL payment	-11	-0%

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

- If hearing loss claim numbers continue to deteriorate beyond current levels, then this could add around $22m to the provision. To be clear, this scenario focuses on recent reporting periods, where much higher numbers of hearing loss claims have begun to emerge; if the whole (very long) tail of the projection began to emerge at much higher levels then the financial impacts could be much larger.
- A reversal of recent improvements in RTW outcomes would increase Income Support and flow-on costs by tens of millions of dollars.

- An improvement in RTW rates to be in line with the best of the last 5 years exit rate experience, just on the first development year, would reduce the liability by around $16m. To be clear, this scenario assumes the number of claims reaching 10 days of lost time does not change, but in reality this can also be influenced by claim management actions; improvements in the proportion of claimants who commence income support benefits have the potential to lead to much more significant financial savings.
- Treatment costs:
  - Higher numbers of late surgeries – for example, if there was a behaviour change whereby claimants seek to have more surgeries covered by the workers compensation system, this could add $26m to the provision.
  - High levels of medico-legal costs continuing on for RTW Act claims due to longer and more complex disputes could add $34m to the provision. We had previously viewed this as a risk mostly related to transitional claims, but on current trends it appears that the slow rate of resolution is now also being experienced in RTW Act claims.
- Lump sums:
  - For a number of RTW Act periods the lump sum numbers are currently tracking lower than pre-reform levels, which we continue to interpret as mainly being a 'slowdown' rather than a 'reduction' in lump sums. If this is not the case, and there is in fact improvement in lump sum experience to the lowest recent level seen, this could result in a release of up to $66m in the provision.
  - On the other side, there are currently pressures on economic loss lump sum sizes and a 10% increase would add $19m to the provision.
  - If the transitional project continues to run at a similar level of newly commenced WPI assessments for the next three years, it would add around $11m to the provision for lump sums; there would also be additional legal, medico-legal and claims handling costs beyond this amount.
  - If a higher proportion of lump sum claims are not eligible for economic loss payments, this could lead to a release of $11m in the provision.

14.6 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 14.6 – Serious Injury sensitivities

	OSC Impact	
	$m	%
30 Jun 21 OSC estimate (Including risk margin at 75% POS)	4,157	
2019 and later IBNR claims emerge similar to 2018	+69	+2%
Late emergence pattern for 2017 and 2018 is in line with older years, and continues for all RTW Act periods	+160	+4%
Return to work rates improve with RTWSA initiatives	-83	-2%
Unpaid care on EnABLE cohort ceases immediately and is replaced with paid care	+158	+4%
Uncertainty around mortality - impact of all EnABLE claims with mortality in line with standard population life expectancy	+427	+10%
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.	+540	+13%
Superimposed inflation is 1% p.a. lower than assumed for medical and care.	-391	-9%
No increase in utilisation of Care benefits after age 65	-86	-2%
Twice the additional allowance for utilisation of Care benefits after age 65	+73	+2%
Upon hitting retirement, a number of Non-EnABLE claimants cease engagement with the scheme and claim fewer medical benefits	-152	-4%
Uncertainty around mortality - impact of removing the allowance for mortality improvement	-243	-6%

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 potential changes in the outstanding claims liability.

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

- Our current ultimate claim numbers for 2019 and more recent accident years sit between the 2017 and 2018 accident years. If ultimate numbers for these accident years are instead in line with 2018 there will be a roughly $70m increase. While this is a less material impact than for some of the other sensitivities, the impact to these individual accident years is more pronounced and so would have greater implications for the average premium rate.
- If the increase in Serious Injury claim numbers being identified at early durations for more recent accident years does not result in fewer claims being identified post development year three – that is, that there continues to be a tail of newly recognised claims, even though ReturnToWorkSA is identifying the claims it thinks are Serious Injuries up front – then the increase to the provision would be around $160m. The current interpretation that the increase in numbers at earlier durations is at least partly a speed up in the identification pattern is very important in the context of both outstanding claims liability and average premium rate.
- For Other Serious Injury claims, we currently assume no change in the utilisation of Medical and Treatment benefits beyond development half year three; however, it is common for some reduction in Medical costs post retirement for long-term claimants. If this is also the case for this cohort then a reduction of up to $150m is plausible.

Changes in the level of benefits payable for care, support and medical needs also have very significant implications for the OSC liability. Conversely, if recently commenced programs manage to help more participants return to work than in the past then this will help to reduce the OSC liability.

14.7 Key uncertainties

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

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

- **The outcome of *Summerfield*** and the **claim impacts if *Summerfield* is not successfully appealed** – ReturnToWorkSA is seeking to appeal the *Summerfield* decision in the High Court, and an outcome of this may not be known for 6-12 months. As explained above, the impacts of not being successful with the appeal (or else having the decision's impacts overturned via legislative change) are financially very significant.

  Further to the above, there is also considerable uncertainty about what the ultimate claim outcomes would be if ReturnToWorkSA are not successful with the appeal. In particular, the ability of claimants and their advisors to achieve higher WPI scores than in the past will be the key determinant of the ultimate financial outcomes. Given the high level of legal involvement in the scheme, the risk of 'adverse behavioural change' is high.

- **Legal precedent risk** – risks here relate to the possibility of decisions which are unfavourable to the scheme or the culture and behaviour of its participants. In particular, there are still many claims in dispute seeking to access higher levels of benefits than ReturnToWorkSA has determined. Despite a number of apparently 'key cases' having resolved over recent years, there has not been any noticeable reduction in the number of such disputes, and indeed new avenues of challenge to the operation of WPI continue to emerge.

  Until a clear and decisive legal position is established as to how the scheme should operate in practice, this risk will remain.

- **WPI assessments** – under the RTW Act, there are significant differences between the compensation available to claims above the 30% WPI threshold and those below. This factor, combined with the lump sum for future economic loss payable to Short Term claims, means there is pressure on WPI assessments. The scheme will face significant financial consequences if this leads to any form of 'WPI creep'. The robustness of the 'once and for all' WPI assessment rules under the RTW Act is an important area of risk.

  Further, we emphasise that no allowance has been made for the growth in Income Support claims reaching the two year legislative boundary to impact on WPI assessments – that is, we have not anticipated any slippage in WPI scores, nor any increase in the numbers of Serious Injury claims, as a result of the increase in claim durations seen between 2018 and early 2020.

- **Serious Injury claim costs** – these claims are entitled to benefits for life, and the risks for this group relate to factors that are common across most claims, and deviations from our assumptions could therefore compound across multiple years. For the current valuation the key uncertainties are:

  > **Ultimate numbers of claims** – there are several areas of uncertainty in relation to Serious Injury claim numbers. These include the impact of late emerging claimants (whether due to delayed WPI assessments, late surgeries, etc) as well as the number of outstanding Serious Injury application disputes and other WPI disputes that could see claims ultimately meet the 30% WPI threshold.

  > **Life expectancy** – the future life expectancy of Serious Injury claimants has a significant impact on future cost projections. There is some evidence emerging that life expectancy for this group could be shorter than is allowed (which would reduce costs), and we will continue to monitor this.

  > **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 move into residential care facilities; on the flip side of this, we have in the past seen that less severely injured claims will often cease their connection to the scheme once they reach retirement age, and if this occurred it could lead to lower costs. Another example is the potential increase in costs for care related specialists due to competition with the NDIS.

- Claim durations for Short Term Claims – between 2018 and early 2020 there was deterioration in claim durations – both more claims reaching the two week threshold to be counted as an Income Support claim, and longer durations on benefit thereafter due to slippage in RTW outcomes (relative to the much improved RTW rates seen over the preceding few years). Over the last 12 months these trends have reversed and improvement is again being seen (and this was despite the disruption caused by COVID-19). It is not yet clear at what level RTW rates will be sustained over time.
- Outcomes for claims with current disputes – risks here include the possibility of decisions which are unfavourable to the scheme, as well as the behavioural consequences of so many disputes remaining. Open dispute numbers remain high and more claims are moving into the later stages of the dispute resolution process.
- Hearing loss claim numbers – there has been unprecedented growth in hearing loss claim numbers in the last two years, and the valuation basis has been lagging this growth. If the upward pressure continues then further increases are likely.
- Economic environment – there is considerable uncertainty in financial markets, and this has impacted the discount rates used to determine the valuation results, which are low by historical standards. While employment related impacts have been less significant than originally feared they might be, there is still a higher than normal risk that the economic environment could change in adverse ways.
- COVID-19 impacts – while the impacts on claim outcomes to date have been modest, there is still uncertainty about how COVID-19 will impact over time. If the health and/or economic situation changes for any reason, for example if there is an unexpected spike in infections, this could potentially lead to material disruption to claim outcomes.

Even though the RTW Act provisions commenced over six years ago, there are still key areas of the Act being tested in the courts, and it is still not clear how many Serious Injury claims will ultimately emerge. The current valuation basis reflects our best estimate of how this experience will eventuate. Over time, our basis will further reflect the developing post-reform experience, and it is possible that the experience will differ materially from our current expectations.

15 Reliances and limitations

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

15.1 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.

An important additional data reliance at this valuation is the input from ReturnToWorkSA's internal and external legal advisors, including from the review of claim files to identify claims who will be impacted by the *Summerfield* decision (if it is upheld).

15.2 Uncertainty

15.2.1 Emergence of key legal precedent

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

There continues to be an unusually high number of cases on appeal to the Supreme Court and until these cases are resolved (and resolved with clarity around the operational implementation of the relevant provisions) there will be uncertainty as to the financial costs which eventuate under the RTW Act benefit package.

The *Summerfield* appeal to the High Court is a specific example of this – depending on the outcome of this appeal the claim liabilities have the potential to be many hundreds of millions higher or lower than estimated.

15.2.2 Other uncertainty

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

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

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

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

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

15.2.3 COVID-19 impacts

The uncertainty at this valuation is heightened by the known and potential future impacts of COVID-19 and its associated shutdowns. Considerable uncertainty remains around the potential impacts over the next few years, and potentially even longer. The actual impacts of COVID-19 on claim outcomes may be materially different from what we have assumed.

15.3 Latent claims

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

There has been a lot of focus on potential new sources of silicosis claims recently, but at this time it does not appear that ReturnToWorkSA is impacted anywhere near as much as some of the Eastern states. While there are negligible claims to date, information from the recent external screening program has identified a group of just over 20 workers with evidence of silicosis or other lung diseases. As such, it now seems more likely that silicosis claims could emergence over time, and we will continue to monitor developments regarding this area of risk.

15.4 Reinsurance

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

15.5 Limitations on use

This report has been prepared for the sole use of ReturnToWorkSA's board and management for the purpose stated in Section 2. 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.

16 Scheme history

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

2007-08

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

2008-09

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

2009-10

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