Scheme Actuarial Valuation as at 30 June 2023

ReturnToWorkSA

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finity

28 August 2023

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

Dear Mr McCarthy

Scheme Actuarial Valuation as at 30 June 2023

Enclosed is our report on the 30 June 2023 scheme actuarial valuation.

As has been the case with our last two reviews, there continues to be higher than normal levels of uncertainty at this time given the real world impacts of the 2022 legislative reforms are only just beginning to emerge. Noting that this is in the context of there being areas of 'behaviour change' in the scheme related to WPI assessments that have not yet stabilised (for example, higher numbers of claims seeking to add additional injuries to increase WPI scores), it may take a number of years before the ultimate post-reform costs are confidently known.

Pleasingly though, underlying RTW rates continue to be positive.

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

Yours sincerely

Andrew McInerney - FIAA　　Tim Jeffrey - FIA　　Claire White - FIAA

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 10.3 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.
General Claims	Claims lodged for all injuries other than Hearing Loss claims.
Hearing Loss claims	Claims lodged for noise induced hearing loss that has arisen from 'noisy work'. Also referred to as Noise Induced Hearing Loss claims.
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 2023.

Our previous actuarial review was as at 31 December 2022, and was documented in a report dated 10 March 2023.

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, Hearing Loss claims and General Short Term claims, reflecting the different benefits available to each group under the RTW Act.

We have also provided a recommended provision for outstanding claims which increases the central estimate to a level intended to achieve 75% probability of sufficiency.

We emphasise that our work makes **no allowance** for any potential changes that could emerge as a result of the Review of Impairment Assessment Guidelines[1] that is currently underway. Given the Scheme's legislative design relies heavily on WPI assessments, and the Impairment Assessment Guidelines prescribe how WPI assessments are to be undertaken, they therefore fundamentally impact the costs of running the scheme. If information emerges that suggests WPI scores are likely to change as a result of the Review, this will need to be incorporated into future valuation work.

1.4 Scheme environment

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

- **Strong growth in insured wages:** completion of the FY22 employer wage declarations showed the highest growth rate in the history of the scheme, with FY22 insured wages 13% higher than FY21. This has been followed by an estimated 6.1% growth for FY23 (noting that the wage declaration process is not yet finalised), which is another high result. This implies that there has been much

[1] The Minister for Industrial Relations and Public Sector has established a Stakeholder Representative Consultation Group to co-design a draft version of the Third Edition Impairment Assessment Guidelines for broader stakeholder consultation.

larger than normal growth in the size of the insured workforce, and there are early indications that this may be starting to lead to growing new claim volumes.

- **Information on claims combining injuries:** combining injuries has been operational for just over 18 months and, while it is still 'early days' in the context of the scheme's claim portfolio, the key learnings are:
  - The proportion of lump sum claims impacted by combining continues to be higher than originally forecast, albeit with a lower proportion of claims impacted in the last six months (19% of lump sum claims, compared to 25% of lump sum claims in 2022). Related to this observation, there continue to be many claimants seeking to add one or more additional injuries to their claim, and this generally occurs well after the original injury.
  - Serious Injury claims have, to date, grown by less than expected. This seems to be due to more claimants emerging below 30% WPI rather than above it; some claimants appear to be withdrawing additional injuries to ensure they can receive a lump sum payment, rather than gain access to a lifetime benefit package.

  Given there is only just over 18 months of actual experience, and noting the generally slow rate of dispute resolution in the scheme, it is not yet clear where each of these elements will stabilise.

- **Legal precedent**: in March 2023 ReturnToWorkSA was successful with its appeal in the *Jackermis* case, which means the current approach to applying deductions on economic loss lump sums will continue. Since we had not incorporated the impacts of the original *Jackermis* decision into our projections there is no impact to our central estimate projections at this valuation, although the positive outcome has been incorporated into our assessment of the risk margin.

  With the operational implementation of some key legislative provisions still being contested, the sustainable level at which the Act will operate at is not yet confidently known. Of particular importance to our assessment are the provisions around WPI assessments, including (1) the extent to which injuries can be combined to increase WPI scores, and (2) how and when a claim is determined to be a Serious Injury.

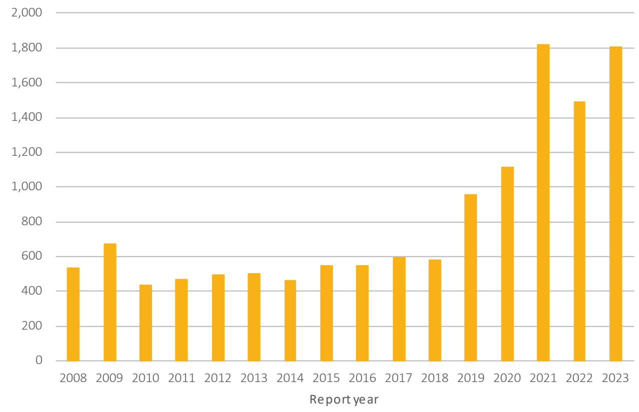
- **Dispute resolution and appeals**: dispute volumes increased from early 2021, averaging over 250 per month since then, but there are some indications of a downward trend in new dispute numbers. While there have been some recent improvements in the time to resolve disputes, overall this process continues to be slow. Disputes are continuing to emerge similarly to the pre-2015 'long tail' scheme, in part due to continued very late lodgement of requests for WPI assessment; there is no legal time limit on claimants seeking new assessments, or the associated dispute activity that is often a result.

- **Claims management model**: the claims management model continues to evolve in response to the scheme's emerging needs, including changes to WPI assessments, dealing with additional injuries, focusing on eligibility decisions and strategic management of the dispute resolution process. Pleasingly, this is continuing to produce the best RTW rates the scheme has seen in many years.

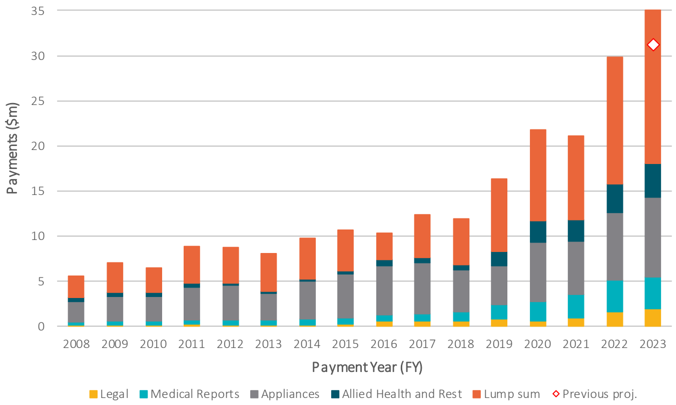
- **Growth in Hearing Loss claim numbers:** there has been very rapid growth in the numbers of Hearing Loss claims in recent years, which appears to be the result of targeted provider activity. This is resulting in rapidly growing costs for Hearing Loss claims, as shown in Figure 1.1.

Figure 1.1 – Hearing Loss claim reports and total costs

Hearing Loss claims reported



Total payments on Hearing Loss claims



1.5 Recent claim experience

The key features of the claims experience in the six months to 30 June 2023 were:

- For claims managed entirely under the RTW Act:
  - Excluding Hearing Loss claims, overall new claim numbers had a small increase; while the increase was much less than the large increase in insured wages, it appears that claim numbers might be beginning to increase.
  - RTW rates have been maintained at very high levels, particularly for more recent injury periods where claims have been managed entirely under the latest management approach.
  - Lump sum average sizes continue to be much higher than was seen prior to combining being a feature of the scheme. The pipeline of new WPI assessments also continues to be high, particularly for claims from 2018 to 2020 injury years – nearly all of which are well beyond their Income Support benefit periods.
  - While the numbers of new disputes were lower in the last six months, they remain high by historical standards.
- Activity continues for transitional claims, particularly for WPI assessments and related activity such as medico-legal assessment and disputes.
- Serious Injury claims have been impacted by a number of factors:
  - New Serious Injury claims continue to be determined many years post-accident, and there is still material uncertainty around the ultimate number of Serious Injury claims for pre-2018 accident years, given the tail of activity. That said, new 'combining' Serious Injury claims were again lower than anticipated, which appears to be at least partly explained by fewer claims seeking to reach the Serious Injury threshold.
  - To date, Serious Injury numbers for the 2021 accident year – the first year fully benefiting from strongly improved RTW outcomes – are emerging at a lower level than the 2018 to 2020 years. Given the long delay between accident and Serious Injury determination, it is not possible to know the extent to which this will translate to a lower ultimate level of Serious Injury claims.
  - Medical and Treatment costs continue to be lower in the periods after initial treatment is completed. As we have previously observed, the only qualitative explanation we have received is that claimants "no longer need to look sick" to remain on benefits.
  - Care costs are generally increasing at well above inflation, driven by large increases in carer fee rates for the NDIS – which typically flow on to ReturnToWorkSA claimants' costs.

- As noted above, Hearing Loss claim reports increased, again reaching the highest levels ever seen in the scheme's history, and payments are growing.

Total net claim payments in the six months were $8m (3%) higher than projected at the previous valuation. Treatment costs (+$8m) and lump sums (+$3m) were the main drivers.

1.6 Liability valuation results

1.6.1 Summary of results

Our central estimate of the scheme's outstanding claims liability for registered employers as at 30 June 2023 is $3,547m. This is a discounted (present value) estimate, net of recoveries and including allowance for future expenses. Adding a risk margin of 16.5% (down from 18.1%) to produce a provision with a 75% probability of sufficiency, consistent with ReturnToWorkSA's policy, gives an outstanding claims provision of $4,132m, as shown in Table 1.1. The provision includes an allowance for future claims handling expenses equivalent to 10.0% of gross claim costs (down from 10.1%).

Table 1.1 – Recommended balance sheet provision

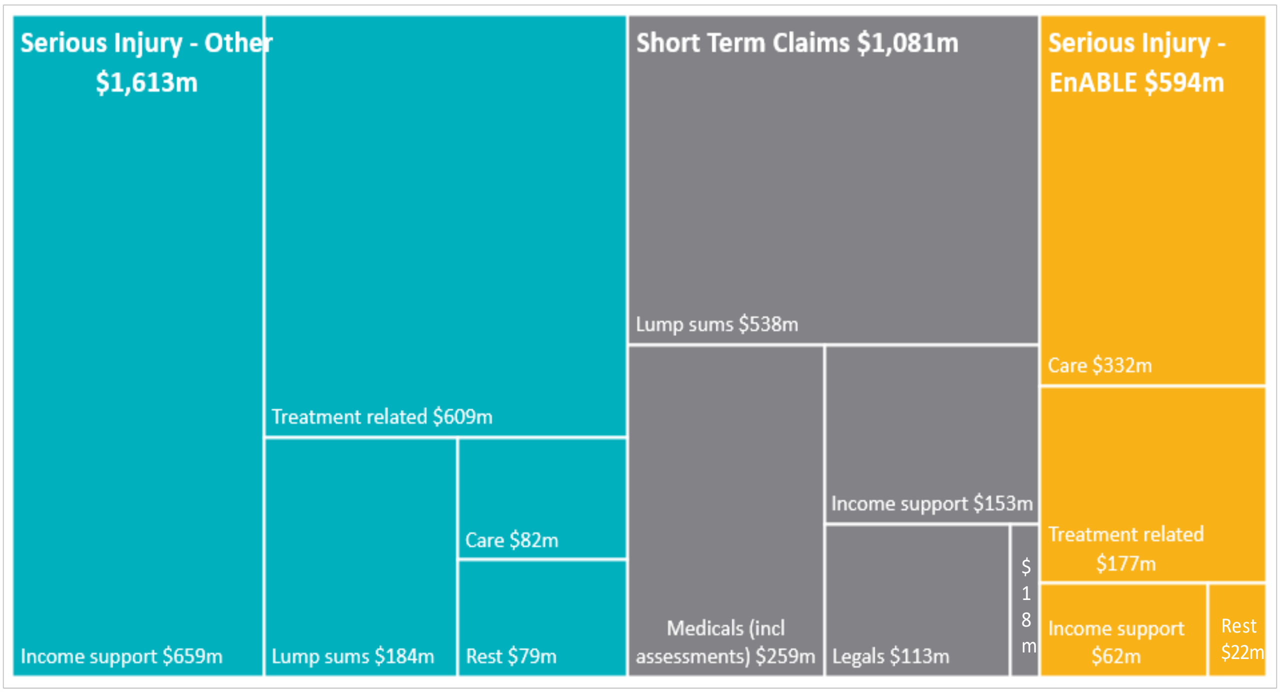
	Central Estimate	Risk Margin	Recommended Provision
	$m	$m	$m
Gross Claims Cost - Serious Injuries	2,207		
Gross Claims Cost - General Short Term Claims	901		
Gross Claims Cost - Hearing Loss Claims	180		
Claims Handling Expenses	327		
Gross Outstanding Claims Liability	3,615	596	4,211
Recoveries	-68	-11	-79
Net Outstanding Claims Liability	3,547	585	4,132

The risk margin loading is high for a scheme of this size, as it incorporates additional loadings related to the uncertainties about the 2022 reforms on top of the underlying variability in our projection of future claim costs. If the reforms achieve their stated aims, i.e. there are no material behavioural responses or adverse legal decisions that undermine their intent, we would expect the risk margin loading to reduce back toward (or even below) the 'underlying' risk margin level over the next 12-18 months.

Figure 1.2 shows a breakdown of the gross claims liability, which demonstrates that the majority of the outstanding claims liability relates to Serious Injuries; the Serious Injury liability has been split between EnABLE claims and other Serious Injuries.

When Serious Injury and lump sum costs are considered together – comprising 83% of the gross liability – it is easy to see why the sustainability, or not, of WPI assessments is key to determining the long-term financial outcomes for the scheme. Any changes to the Impairment Assessment Guidelines are important in this context.

Figure 1.2 – Gross central estimate (excl. expenses and risk margin) as at 30 June 2023



1.6.2 Movement in liability

Our net central estimate is $35m higher than projected at the previous valuation. We have broken this change into two components:

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

This split also allows calculation of the actuarial release, where we add the difference between actual and expected payments to the movement in the liability due to claims experience, to give a measure of the profit impact of claims performance relative to the previous valuation; see Table 1.2.

Table 1.2 – June 2023 central estimate and determination of actuarial release/(strengthening)

	Central Estimate		
	Liability Estimate[1]	AvE Payments in 6 mths to Jun-23	Actuarial Release/ (Strengthening) [2]
	$m	$m	$m
Liability at Dec-22 Valuation	3,402		
Projected Liability at Jun-23 (from Dec-22 valuation)	3,512		
Claims Movement - General Short Term Claims	31	4	-35
Claims Movement - Hearing Loss Claims	34	4	-38
Claims Movement - Serious Injury	-40	0	40
Impact of Change in economic assumptions	11		
Recommended Liability at Jun-23	3,547		
Total Actuarial Release/(Strengthening)			-32

[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 (cost increase) of $32m for the period. Changes to the economic assumptions increased the central estimate by $11m. The components of the actuarial release are discussed briefly below.

1.6.3 Components of the actuarial release/(strengthening)

Table 1.3 shows the $32m actuarial strengthening by entitlement group, split between General Short Term Claims, Hearing Loss Claims, and Serious Injuries.

Table 1.3 – Actuarial release/(strengthening) by entitlement group

Entitlement Group	General Short Term Claims[3]	Hearing Loss Claims[3]	Serious Injury Claims[3]	Total Actuarial Release[3]	Release (Strengthening) as %
	$m	$m	$m	$m	
Income & Related	3	0	-10	-8	-1%
Lump Sums	-18	-6	20	-3	-1%
Legals	2	0	4	6	4%
Treatment Related[1]	-17	-26	15	-28	-2%
Rehabilitation	-1	0	1	0	2%
Other Costs[2]	0	0	0	0	0%
Recoveries	4	0	-3	1	1%
Total Claim Costs	-27	-32	27	-32	-1%
Expenses	-8	-5	13	0	-0%
Net Central Estimate	-35	-38	40	-32	-1%

[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 movements at the current valuation are:

- For **General Short Term Claims** there is an actuarial strengthening (cost increase) of $35m due to:
  - > An increase of $18m for lump sum costs, with the key drivers being:
    - – An $11m increase due to higher than expected numbers of claims receiving a lump sum, particularly for the 2018 to 2021 accident years.
    - – A $9m increase due to a higher allowance for the number of future 30-34% WPI lump sums, as fewer claims are now expected to reach the Serious Injury claim WPI threshold and instead will remain as Short Term Claims. This offsets some of the savings on Serious Injury claim numbers that are captured below.
  - > A $17m increase for Treatment related costs (Medical, Hospital, Physical Therapy, Travel, Other) due to higher average payment sizes.
  - > An increase in the claims handling expense loading ($8m), with more expenses being allocated to Short Term Claims.
  - > Some smaller offsetting savings resulted from Income & Related ($3m release) and Recoveries ($4m release).
- For **Hearing Loss Claims** there is an actuarial strengthening (cost increase) of $38m due to:
  - > A $26m increase for Treatment related costs, primarily related to hearing aids and ‘fitting fees’. The tail of costs is continuing at a higher level than previously assumed, as more claimants are accessing hearing aids for longer.
  - > An increase of $6m relating to lump sums, following higher claim reports and indications of an increasing proportion of claimants receiving a lump sum.

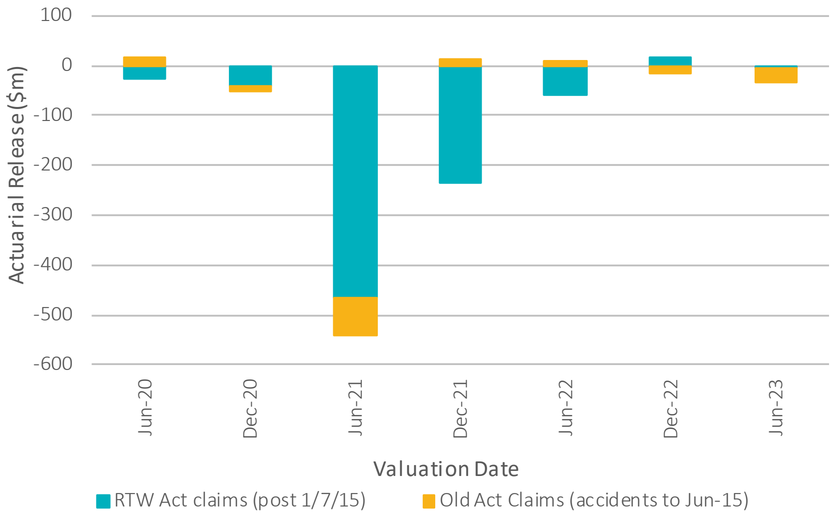
- For **Serious Injury claims** there was an overall actuarial release of $40m due to:
  > A $64m net reduction as a result of claim number changes, comprising:
    - A $48m increase due to higher *primary* Serious Injury claim numbers. A small number of Severe Traumatic Injury claims with very high care needs contributed to this result.
    - A $111m decrease for claims who are *combining injuries* to reach Serious Injury. Fewer than expected claims are reaching the Serious Injury threshold due to combining injuries, but those who do are tending to have a higher than expected claim size.
  > A $22m increase due to s56A and redemption assumptions. This is mainly from recognising the latest information on claims, including claimants' response to redemption offers and changes in claimant circumstances that indicate a lower likelihood of taking a s56A payment.
  > A $15m increase due to other changes. The main driver was an increase in expected Income Support spend for Other Serious Injury claims.
  > The allowance for expenses has reduced by $13m due to a decrease in the expense allowance from 7.5% to 7.0%.

Other changes had more minor impacts on the scheme liability.

Figure 1.3 shows the actuarial release/(strengthening) at each valuation over the last few years, which shows that costs have tended to be higher than projected in recent years (negative actuarial releases).

Figure 1.3 – History of actuarial releases/(strengthenings)

NB: reform impacts are excluded from this graph



1.6.4 Impacts of economic assumption changes

Changes to inflation and discount rate assumptions increased the net central estimate by $11m.

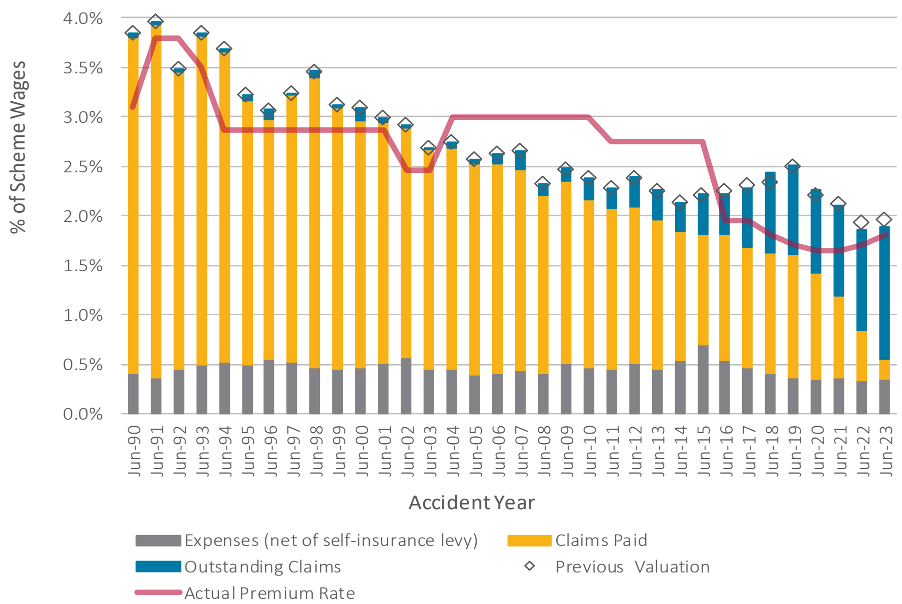
Overall, compared to what was adopted at the December 2022 valuation, the current economic assumptions imply a bigger gap (between AWE and discount rates) at very short durations and longer durations, offset by a lower gap at mid durations. The adopted economic assumptions continue to anticipate that wage inflation will be modest (3.5% p.a. initially, then reducing gradually), so if current price inflation pressures begin to emerge as higher wage inflation this would present a risk to the scheme's liabilities.

1.7 Historical scheme costs

We have estimated the 'historical premium rate', or 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 the estimated BEP for each year, including a comparison with the estimates at our previous valuation and the scheme's actual average premium rate charged.

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 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.
- Costs are higher for 2016 to 2019, due to the introduction of the Economic Loss Lump Sum as part of the 2015 reforms. The 2018 and 2019 years continue to develop as high cost years, due to a combination of poor early RTW outcomes, higher levels of lump sums, and higher than normal Serious Injury costs.
- The BEP estimates for 2020 and 2021 are lower than 2019, due to improved RTW rates and fewer projected lump sums and Serious Injury claims.
- A further reduction is projected for 2022 and 2023 claims, where further RTW improvements are impacting – the BEP rates for these two years also benefit from the growth in exposure, as to date this has not being matched by growth in claim numbers or costs. These improvements have reduced the current estimate of the BEP (using risk free rates) for the 2023 accident year to 1.90% of wages, down from 1.99% at the December 2022 valuation.

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 reforms, which is still subject to a high degree of estimation uncertainty.

1.8 Key uncertainties

There is considerable uncertainty in the projected future claim costs, in particular around how and when claims are determined to be Serious Injuries and in the WPI scores used for lump sums. Section 11 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:

- **Reform impacts** – rather than removing the ability to combine injuries, the 2022 reforms introduced other changes that attempt to manage the financial consequences of claimants getting higher WPI scores. As a result, the uncertainty relating to the impact of combining injuries is now compounded by the uncertainty around the success of the reforms in removing costs from other areas. Noting that 90% of new Serious Injuries in the last six months were still determined under the old rules, this means a significant portion of the valuation is still largely based on assumed outcomes, rather than on a reliable history which is the usual approach for producing actuarial estimates. While we believe our assumptions and projections are reasonable given the information available, the uncertainty is elevated compared to normal.
- **Behavioural risk** – related to the above, the ultimate outcomes that emerge directly depend on how claimants and their advisors seek to achieve higher WPI scores than in the past, now that the ability to combine injuries is a codified feature of the scheme; further, after the 2022 reforms, the incentives have changed such that claimants are now likely to simply seek the highest WPI. Given the high level of legal involvement in the scheme, the risk of adverse behavioural change is high. As an example of this, claimants are changing their behaviour to try to add more injuries to their claim than was seen in the past.
- **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. Given the high volume of disputes, despite a number of 'key cases' having resolved over recent years, this risk is also assessed as high. Until a clear and decisive legal position is established as to how the scheme should operate in practice, this risk will remain. Compounding this are:
  - The introduction of new legislative provisions which will inevitably lead to new areas of challenge
  - Precedent that fully defines the boundaries on how and when injuries can be combined is still to be established; that is, the *Summerfield* decision's requirement for an 'evaluative test that is to be applied adopting a common sense approach' has not provided comprehensive guidance on how and when injuries should be combined.
- **WPI assessments** – under the RTW Act, small changes in the WPI score can equate to many tens of thousands of dollars in some cases, and WPI assessments also govern access to the significant compensation available under the Serious Injury benefit package. The scheme will face significant financial consequences if this leads to any form of 'WPI creep'.

  Given there is no current legislative tool that addresses the 'tail risks' that have emerged from behaviour changes since the RTW Act commenced, there is a chance that outcomes will be different to expected. Indeed, the inclusion of higher lump sum amounts in conjunction with the ability to combine injuries over time arguably creates an environment which encourages claimants to delay their WPI assessments in pursuit of higher WPI scores.

As explained in Section 1.3, our work makes no allowance for potential changes to WPI scores as a result of the current Review of the Impairment Assessment Guidelines; if any changes to WPI scores result from this Review they will need to be factored into future valuation work.

- Serious Injury claim costs – these claimants are entitled to benefits for life, and the risks for this group relate to factors that are common across most claims, meaning deviations from our assumptions could therefore compound across multiple years. For the current valuation the key uncertainties (beyond reform specific 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 (due to delayed WPI assessments, late surgeries, etc) as well as the number of outstanding Serious Injury application disputes and other WPI related disputes that could see claims ultimately meet the Serious Injury WPI threshold.
  - Life expectancy – the future life expectancy of Serious Injury claimants has a significant impact on future cost projections.
  - Cost escalation – the potential for future cost escalation in a number of medical, care and treatment related items poses a risk. A current example is the pressure on costs for care related specialists due to competition with the NDIS.
- 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 having high dispute volumes.
- Hearing Loss claim numbers – there has been unprecedented growth in Hearing Loss claim numbers in the last few years, which is now producing strong cost growth. If this continues further cost increases will eventuate.
- Economic environment and inflation risk – there is considerable uncertainty in financial markets, and this has impacted the discount rates used to determine the valuation results, which remain low by historical standards. With price inflation increasing quickly over the last year, there is a risk that this will flow into higher than anticipated wage inflation; if this occurs the scheme's liabilities would be impacted.

As context to our remarks above, it is important to remember that on current reporting patterns it takes around eight years until most Serious Injury claims are determined. As a result, in assessing the potential uncertainties that impact on current liability assessments, it is necessary to consider not just current behaviours but also what is likely to occur over (say) the next decade.

As demonstrated by outcomes in the last two years, despite the fact that the RTW Act commenced in 2015 there are still key areas of its provisions that are being tested in the courts, and hence there is uncertainty as to their 'real world' boundaries. The current valuation basis reflects our best estimate of how this experience will eventuate. Over time, our basis will further reflect the actual post-reform experience as it develops, and it is possible that the experience will differ materially from our current expectations.

To place these uncertainties and risks in context, Figure 1.5 shows some of the key risks and uncertainties in the central estimate (orange), as summarised in Section 11 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

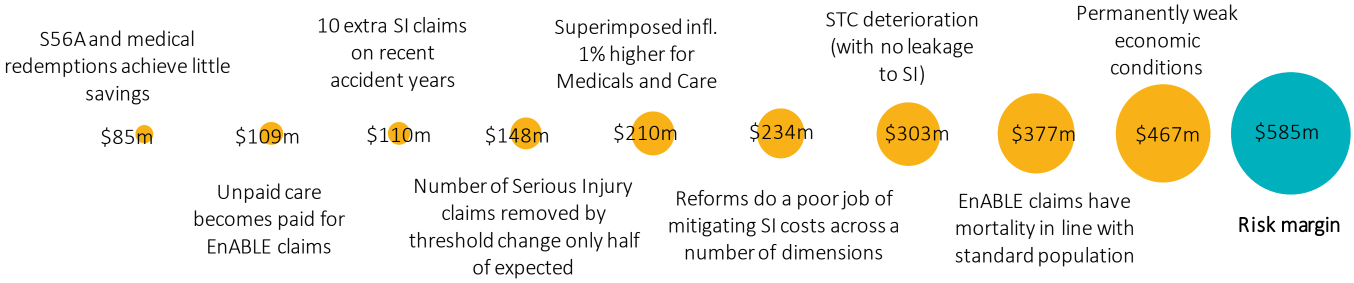


Figure 1.5 indicates that there are a range of plausible scenarios that could see the liability move by several hundreds of millions of dollars. While the most significant scenarios relate to long term economic conditions (which will continue to be the case now for the Fund, given its very long mean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

We observe that while most of the larger risks would emerge over the long term, a significant increase in the liability reserves could occur more quickly. In particular, any change that led to more claims meeting the criteria for Serious Injury benefits would have immediate consequences for the liability, as demonstrated by the *Summerfield* case.

1.9 Reliances and limitations

Our results and advice are subject to a number of important limitations, reliances and assumptions. This executive summary must be read in conjunction with the full report and with reference to the reliances and limitations set out in Section 12 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 2023.

Our previous actuarial review was as at 31 December 2022, and was documented in a report dated 10 March 2023.

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).

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 and our projection of ultimate claim numbers.
Sections 6 to 8	Detail our analysis of scheme experience and the valuation assumptions for different segments of the portfolio.
Section 9	Sets out other valuation assumptions, including the economic assumptions of inflation and discount rates, and the risk margins and claim handling expenses adopted in setting accounting provisions.
Section 10	Shows detailed tabulations of the outstanding claims valuation results.
Section 11	Provides sensitivity analysis of the valuation to key assumptions and highlights some of the key uncertainties in our projections.
Section 12	Sets out important reliances and limitations.
Section 13	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 used

3.1 Approach

Under the Return to Work Act 2014 (“RTW Act”), Serious Injury claims have very different entitlements from other claims, as such we have modelled these claims separately. The remaining claims are described as ‘Short Term claims’ and are modelled in two segments: ‘General Claims’ and ‘Hearing Loss claims’.

Serious Injury Claims are valued using an individual claim-based approach by payment type, and Short Term Claims are valued using aggregate methods, by payment type.

Table 3.1 summarises where the entitlement and claim cohorts are documented in this report. Additional technical detail is provided in the appendices.

Table 3.1 – Report Structure by Claim Cohort

	General Short Term Claims	Hearing Loss Short Term Claims	Serious Injury Claims	Other Assumptions	Overall Results
Valuation Basis and Results	Section 6	Section 7	Section 8	Section 9	Section 10
Economic Impacts	Section 9 (basis) and Section 10 (results)				

There have been no changes to the RTW Act since our previous review.

3.1.1 Allowances for ‘combining injuries’

There is still significant uncertainty about the impacts that will result from the ability to ‘combine injuries’ that was codifed via the *Return to Work (Scheme Sustainability) Amendment Act 2022*. This uncertainty results from a combination of factors:

- There is only limited historical claims information that can be used to directly assess the financial impacts of undertaking WPI assessments this way
- The unknown extent to which behavioural responses will impact implementation of the decision – both by legal providers who seek to maximise the impact, and by ReturnToWorkSA in attempting to mitigate the impact
- The absence of clear guidance on how these rules should operate in practice as ‘an evaluative test that is to be applied adopting a common sense approach’[2].

There is now just over 18 months of actual experience which includes combining of injuries. The experience in the last six months moderated slightly from what was seen in the first year after the change (where more claims were combining injuries than anticipated), with a lower proportion of lump sum reports having combined injuries and also a slight reduction in the average WPI score. The number of additional Serious Injury claims due to combining was also lower than initially expected.

Given there is only just over 18 months of actual experience, and noting the generally slow rate of dispute resolution in the scheme, it is not yet clear where each of these elements will stabilise. Information on the learnings from claims combining injuries is set out in Section 4.4.1.

[2] Paraphrased from the Summerfield decision: Return To Work Corporation of South Australia v Summerfield, [2021] SASCFC 17

3.1.2 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 any special features in the claims experience.

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 information on combining injuries is still relatively immature, along with the additional uncertainty introduced by the 2022 reforms, the risk margin remains higher than normal for a scheme of this size.

We observe that despite a number of apparently 'key legal cases' resolving over recent years, provisions of the RTW Act have continued to be challenged over time, in particular in relation to the operation of WPI assessments. The introduction of further reforms in 2022 is likely to see this continue.

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 2023. We have not independently verified or audited the data, but we have reviewed it for general reasonableness and consistency, including reconciliations to the previous actuarial review information and to information from ReturnToWorkSA's financial statements. The claims data appears to be of high quality and contains extensive detail.

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

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

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 in early June 2023 and operational information that was provided separately.

The additional information is outlined in Appendix B.

4 Scheme environment

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

4.1 Legal precedent under the RTW Act

The RTW Act continues to be tested through the scheme's dispute resolution processes. Until there is a settled legal basis that clarifies how the scheme's boundaries should operate in practice there will be uncertainty as to the financial costs which will 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 include:

- The extent to which combining injuries is allowed for in WPI assessments – the *Summerfield* decision described the interpretation as needing to be 'an evaluative test that is to be applied adopting a common sense approach', and how these rules should operate in practice is yet to be fully determined.
- Technical details related to WPI assessments, such as how deductions should be made for prior impairments, precise quantification of what constitutes a specific body part (e.g. the spine, a knee joint, etc).
- How and when employment is considered to be the 'significant cause' of secondary injuries or injuries away from the workplace.

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 how long it takes for dispute resolution thereafter – and acknowledging that new areas of challenge will keep emerging following the 2022 reforms, it will still be a number of years before there is confidence about how the RTW Act legislative provisions apply in practice.

4.1.1 *Jackermis* case[3]

In our previous valuation we made reference to a decision of the Full Bench of the South Australian Employment Tribunal that was counter to the way ReturnToWorkSA has been applying 'deductions' when a claim has a second (or further) future economic loss lump sum amount. The impacts of this decision (*'Jackermis'*) were not incorporated in our projections since ReturnToWorkSA had appealed the decision to the South Australian Court of Appeal.

In March 2023 ReturnToWorkSA was successful with its appeal, which means its approach to applying deductions will continue. Since we had not incorporated the impacts of the original *Jackermis* decision into our projections, there is no impact to our central estimate projections at this valuation; the reduction in specific legal risk has been incorporated into our updated risk margin loading.

4.2 Review of Impairment Assessment Guidelines

The Minister for Industrial Relations and Public Sector has established a Stakeholder Representative Consultation Group to co-design a draft version of the Third Edition Impairment Assessment Guidelines for broader stakeholder consultation. The Impairment Assessment Guidelines prescribe how WPI assessments are to be undertaken, and therefore fundamentally impacts the cost of running the scheme.

Given we have no knowledge of what changes (if any) will result from this review, no allowance has been made for any changes in our estimates. If information emerges that suggests WPI scores are likely to change as a result of the review this will need to be incorporated into future valuation work.

[3] Woolworths Group Limited v Jackermis, [2023] SASCA 31

4.3 COVID-19 impacts

The COVID-19 pandemic and related health and economic response has been an evolving issue over the last few years. 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 less severe than in other places.

While the impacts to date have been small, it is possible that this could change. Our valuation basis assumes that claims related to COVID-19 infections continue to remain low in South Australia and that there are no additional lockdowns, economic disruption or major impacts on business confidence that would materially impact on RTW outcomes.

Since the scheme experience during 2020 to 2023 has been used to guide the setting of valuation assumptions, our results implicitly incorporate the impacts of the COVID-19 environment to some extent. While we have made assessments that we consider to be reasonable, since it is impossible to predict the future impacts of COVID-19 the general level of uncertainty around the valuation remains higher than normal.

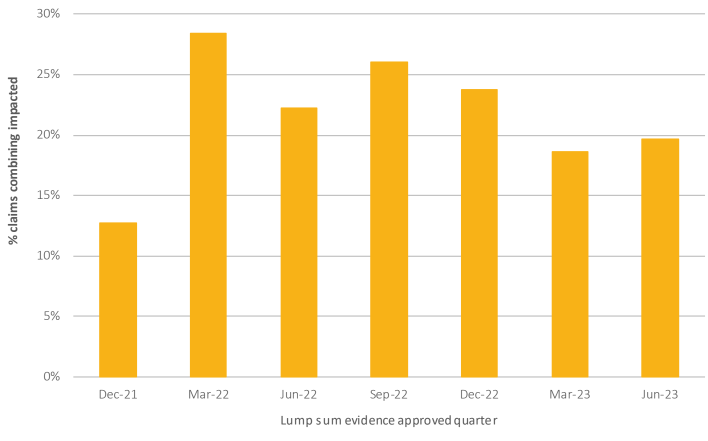
4.4 Other operational and environmental changes

This section describes recent trends in the scheme environment. Section 13 provides an overview of earlier operational and legislative changes which are useful in understanding the scheme's historical experience.

4.4.1 Initial real-world data on combining injuries

Combining injuries has now been operational for just over 18 months, meaning a growing group of claims have outcomes from WPI assessments that were conducted wholly under the new combining rules. Figure 4.1 shows the proportion of recent lump sum payments that were impacted by combining.

Figure 4.1 – Proportion of lump sums impacted by combining

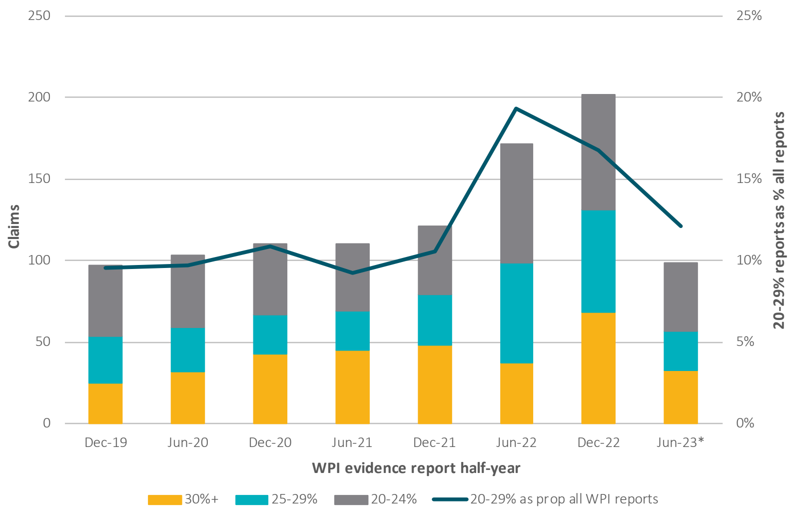


In the last six months, 19% of claims who had a lump sum payment were impacted by combining. While this is lower than the level seen in the first 12 months of combining, it continues to demonstrate that combining injuries will impact a significant proportion of claims that enter the lump sum process. Further, since it is still early days with injury combining as a feature of the scheme we are not yet confident about where the level will ultimately settle. We expect it will take a number of years to be definitive about the long-term level, and note that where combining impacts ultimately settle will also depend on claimant and legal provider behaviour over time.

Related to the above point, there continues to be a large number of claims – many more claims than in the past – seeking to add 'additional injuries'; generally speaking these additional injuries come well after the original claim notification, so we continue to view this as a lead indicator of behavioural changes. The increased incentives that result from being able to combine injuries, along with the consistent upward trend in the number of additional injuries now being sought, means this is an area that requires ongoing attention.

The other key change that has been identified to date is that more claims are achieving WPI scores in the 20-29% range since combining injuries became part of the assessment process. As shown in Figure 4.2, there has been a notable increase in the proportion of claims are being assessed in this range.

Figure 4.2 – Proportion of WPI assessments with higher WPI scores



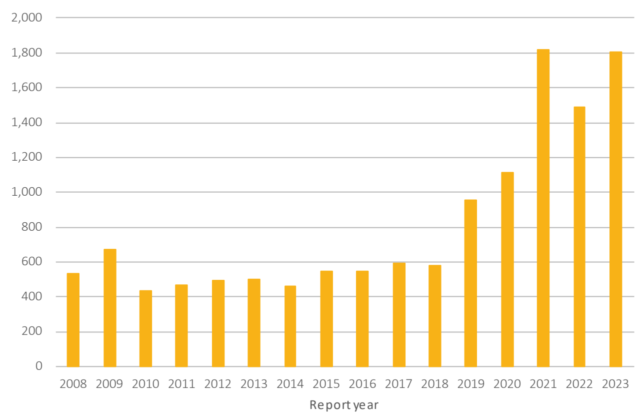
Note: information for the Jun-23 datapoint is incomplete due to delays with data capture; the Jun-23 result will backdate when this information is re-cut at the next valuation.

4.4.2 Growth in hearing loss claims (and costs)

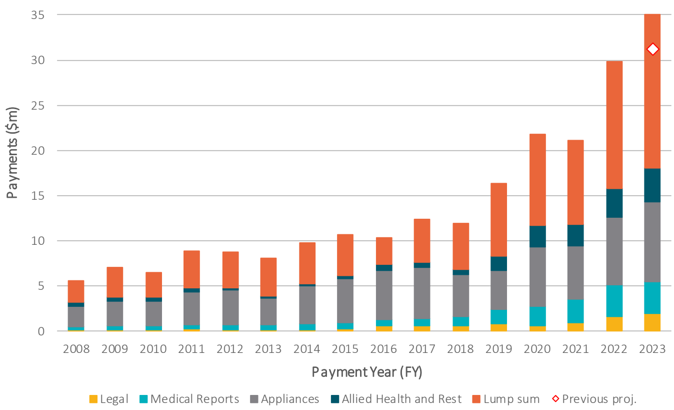
There has been very rapid growth in the numbers of Hearing Loss claims in recent years, which appears to be the result of targeted provider activity. This is resulting in rapidly growing costs for Hearing Loss claims, as shown in Figure 4.3.

Figure 4.3 – Hearing Loss new claim volumes and total costs

Hearing Loss claims reported



Total payments on Hearing Loss claims



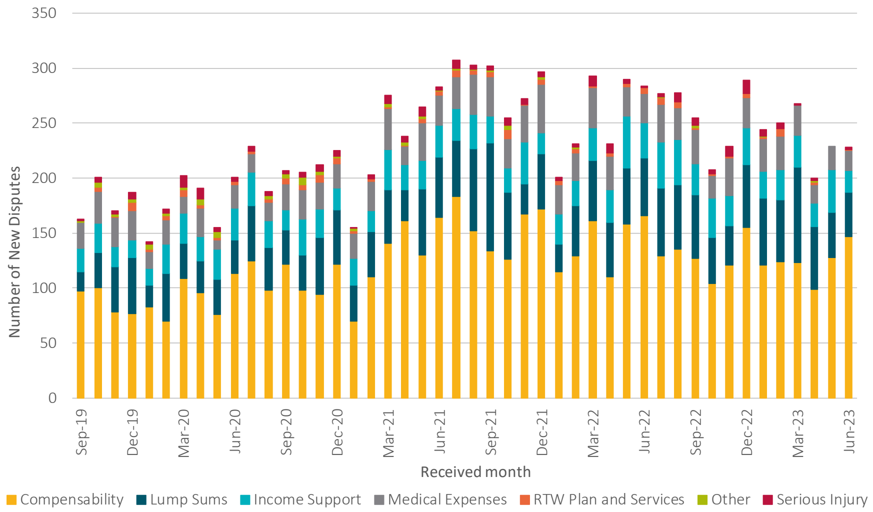
The rapid growth in both numbers and costs is putting pressure on the claims liabilities, as evidenced by the payment growth in the last six months above the previous projection. If current trends continue our projections are likely to continue increasing over time.

4.4.3 Dispute numbers and dispute resolution

After the RTW Act commenced in 2015, there were generally 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.

However, dispute volumes increased in March 2021, and have since averaged over 250 per month, as shown in Figure 4.4. Pleasingly, there are some indications of a downward trend in new dispute numbers, and the last six months was the first time in two years that the average per month was below 250.

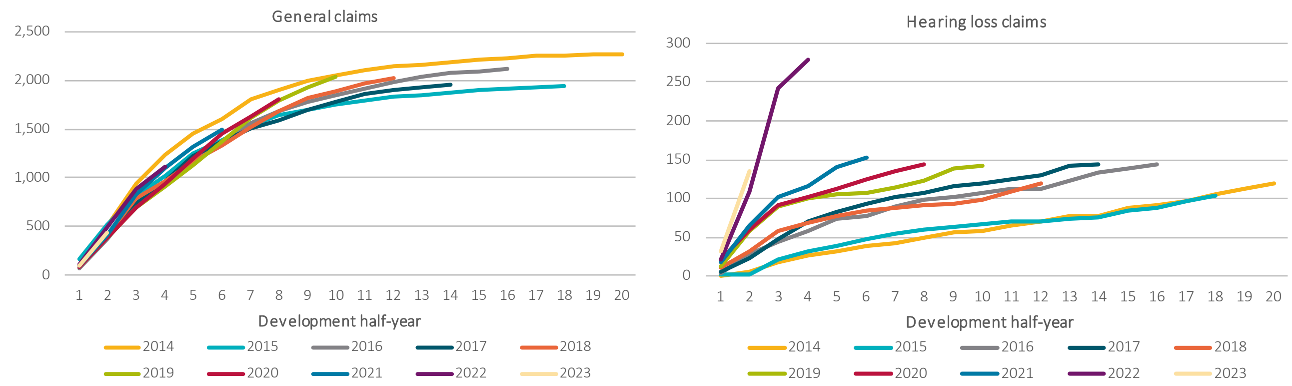
Figure 4.4 – New disputes by dispute type (monthly)



The higher dispute volumes relate primarily to 'compensability' and 'lump sum' disputes and can be linked to an increased operational focus on compensability decisions, including for the growing volume of claimants that are seeking to add additional injuries to their claim.

Growing volumes of Hearing Loss claims have also been a key driver of increased dispute activity. Figure 4.5 shows the cumulative number of disputes for each accident year since 2014, separately for Hearing Loss and general claims. Generally speaking, the trends over recent years have been poor, with the patterns tending to be 'fanning out' such that each year is above the previous year when it was at the same duration.

Figure 4.5 – Number of disputes commenced by (financial) accident year



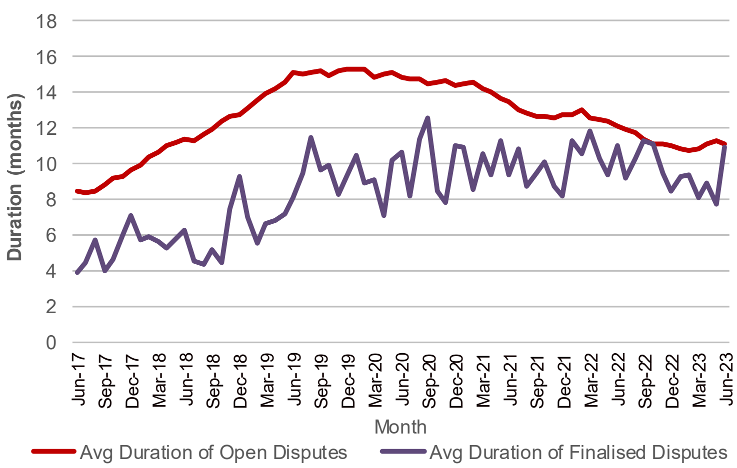
The key features to note are:

- Hearing Loss claim disputes have been increasing year-on-year, with the last two years being particularly high on the back of very high growth in new claim numbers.
- For non-hearing loss claims:
  - > The number of disputes initially reduced under the RTW Act, with 2015 developing lower than 2014.
  - > Accident years 2016 to 2020 all started lower than 2015 (each is lower than the 2015 line out to development half-year 6). This gave weight to the view that dispute numbers were likely to be lower under the RTW Act.
  - > However, each of the years 2016 to 2020 has developed to be at a higher level than 2015 at the same development stage. On current trajectories, dispute numbers for these years appear likely to end up closer to, or even above, the 2014 (pre-reform) level than to 2015.
  - > 2021 and 2022 started by emerging higher than earlier years, but in the last year there have been indications that volumes have started to reduce.
  - > Importantly, we observe that many disputes are occurring after claims have ceased Income Support benefits, which typically occurs at around development half-year 5. This supports the observation that significant disputation seems related to WPI assessments.

Compounding this, since the RTW Act commenced there has been a clear shift in dispute finalisation patterns, with fewer disputes resolving at or before conciliation. As more claims have extended into the later stages of dispute, this has extended the duration of disputes and increased the legal expenditure, resulting in a higher average legal spend per dispute and delayed claim outcomes.

The significant growth in the number of disputes moving beyond conciliation led to a considerable lengthening of dispute timeframes over time, although there are signs of improvement as ReturnToWorkSA has been seeking to proactively settle some matters. Figure 4.6 shows the average duration of open and finalised disputes.

Figure 4.6 – Average duration of disputes



Even though there has been some recent improvement in dispute durations, we observe that an eight month dispute resolution timeframe is still considered slow.

5 Recent claims experience

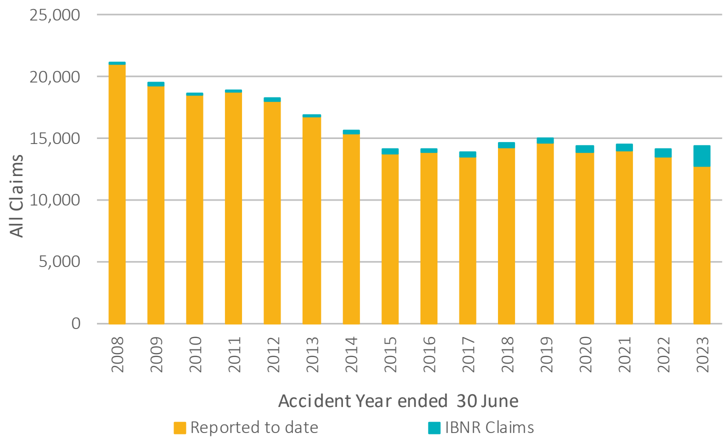
This section provides a high-level analysis of scheme experience, including the numbers of new claims and overall payment trends.

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 period of trending downwards, claim numbers flattened out between 2015 and 2017. Numbers increased again during 2018 and 2019 but have reduced from 2020 which was partly impacted by COVID-19. There are early indications that claim numbers are beginning to increase again, with the standout being Hearing Loss claims which have experienced significant year on year growth since 2018.

Our estimate of ultimate claim numbers for 2023 has increased by 3.4% since the previous valuation, with the 2019 to 2022 years also being increased by around 0.7% on average in response to the higher Hearing Loss claim volumes.

There were offsetting movements in our underlying valuation response which reflect the following observations:

- Hearing Loss claims emerged at a higher level over the last six months, with strong reports for injury periods 2019 and onwards; we have increased our expected claim volumes by 7% for these periods. For future periods we have increased our projected claim numbers by 8% to 9%. Hearing Loss claims now represent 12% of all claims expected to be received for a new injury year, compared to 6% in 2018.
- Mental injuries had been reducing over recent years, which we attribute to a lower level of claims activity due to broader understanding of eligibility rules, however over the last 12 months we have observed a strong rebound in claim numbers, which are currently trending upward. Projected claim numbers for 2023 have been increased by 7%.
- For musculoskeletal claims the emerging experience has been more stable, with slightly lower than expected claims emerging to date for 2022 and 2023. Projected claim numbers for 2023 have reduced by 2%.

- For physical trauma injury claims the emerging experience is marginally higher than expected, and the projected claim numbers for 2023 have been increased by 3%.
- 'Other' claims are relatively small in number (and with backdating of injury coding, it takes a little longer to confirm numbers and trends for 'other'), and were close to expected; the projected claim numbers for 2023 have been increased by 2%.

5.1.2 Income support claims

Income Support (IS) claims in the valuation work are those who 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

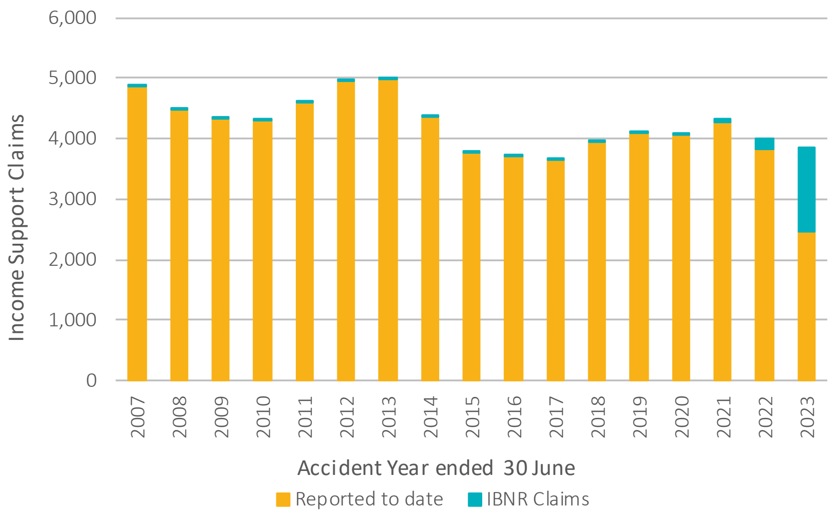


Figure 5.2 shows:

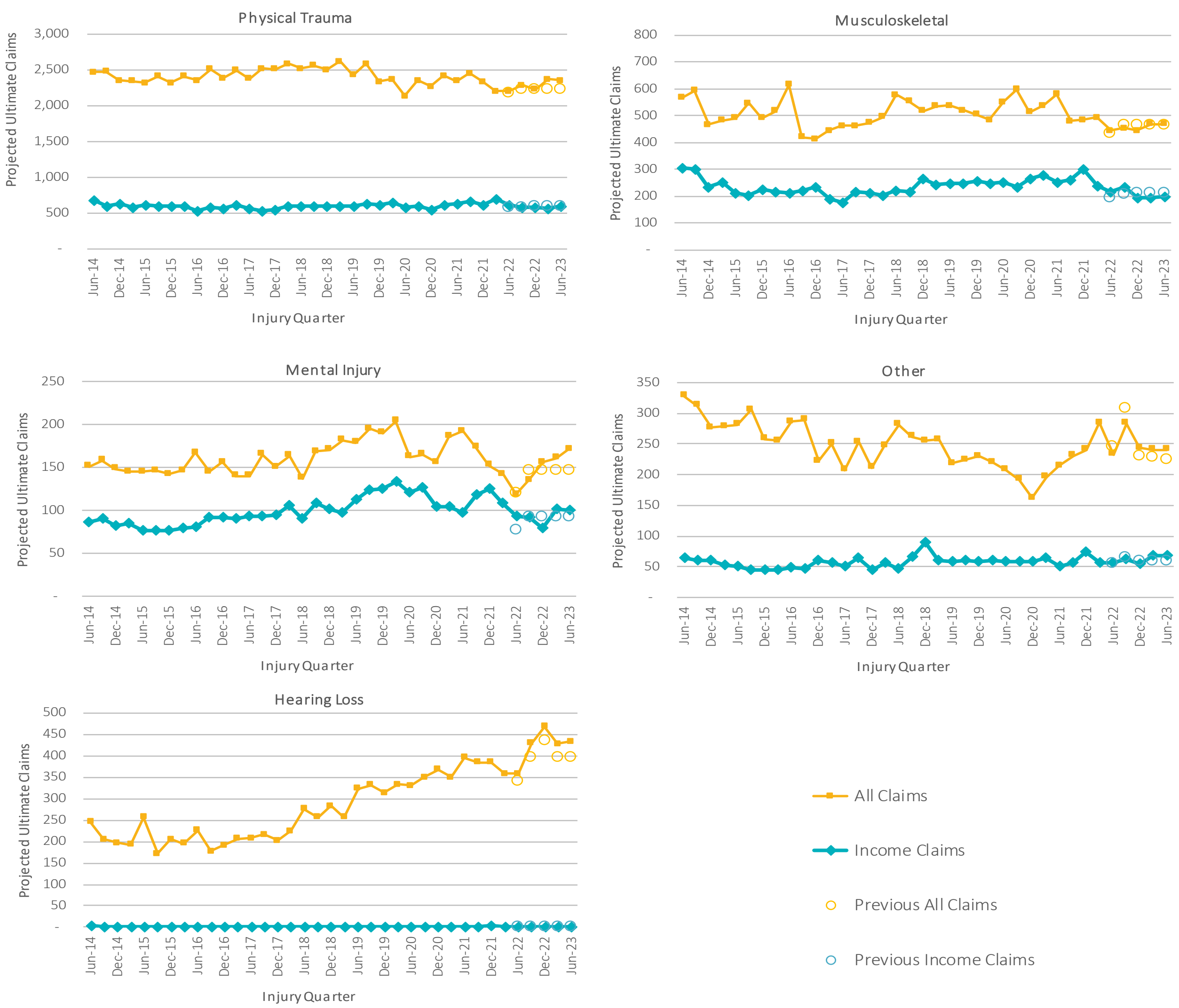
- Between 2017 and 2021, IS claim numbers rose.
  - > The estimate of IS claim numbers for 2018 is 9% higher than 2017, and the 2019 estimate is 4% higher than 2018.
  - > For the 2020 injury year, and despite it being significantly impacted by COVID-19 and having lower claim numbers overall, we saw a similar number of Income Support claims as 2019 – this means the proportion of claims getting Income Support 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 emerged even higher again, a further 6% higher than 2020 levels.
- With the majority of income claim numbers now known for the 2022 year, we can now see that the trend has been reversed and there an 8% reduction on 2021 levels. This is due to a lower proportion of physical trauma and musculoskeletal claims receiving 10 days lost time; the operational focus on RTW appears to be getting more claimants back to work in the first two weeks after injury than was previously the case.
- 2023 is emerging lower again, which is consistent with other tracking that shows general improvement in RTW outcomes, but the projection does still have a large proportion of IBNR

claims and so there is more uncertainty around the ultimate outcomes for this year. We are currently forecasting 2023 to be 4% lower than 2022.

Interestingly, these trends were achieved in spite of significant growth in the insured remuneration exposure, which in 2022 had the highest rate of growth in the history of the scheme. This is discussed further in Section 9.6.

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

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

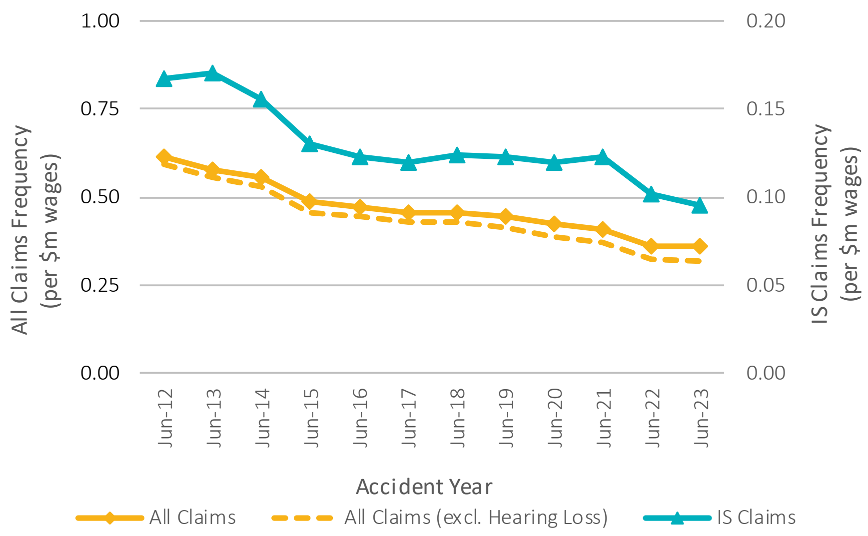


The mix of claims by injury type has important implications for longer term IS claim costs, as there are notable differences in claim durations between the different groups.

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 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 diverged from the all claims frequency between 2016 and 2021. While the overall claim frequency has been reducing consistently over time, and quite strongly in some recent years, the IS claim frequency did not reduce until 2022. For 2023, the IS frequency is projected to further improve, despite there being relatively little change in the all claims frequency.

The trend in all claim frequency is broken down further in Table 5.1.

Table 5.1 – Projected ultimate claim frequency: comparison to previous

	All claims (excl. hearing loss)				Hearing Loss Claims			
Accident Year	Claim Freq (per $m of wages)	Year on Year % Change	Prev. Proj	Change from Prev	Claim Freq (per $m of wages)	Year on Year % Change	Prev. Proj	Change from Prev
Jun-20	0.385	-7.1%	0.385	0.0%	0.038	16.4%	0.036	5.6%
Jun-21	0.369	-4.1%	0.369	-0.1%	0.041	7.9%	0.039	5.1%
Jun-22	0.323	-12.6%	0.322	0.3%	0.038	-8.3%	0.036	4.9%
Jun-23	0.315	-2.2%	0.307	2.8%	0.044	15.4%	0.040	7.7%

5.2 Serious Injury claims

5.2.1 Background and approach

The *Sustainability Act 2022* raised the Serious Injury threshold from 30% to 35% WPI for physical injuries for claims who have had not had their final examination for at least one body part by 31 December 2022; there are some nuances to these rules for current interim determinations, which were detailed in our June 2022 report.

Given there is, as yet, only very limited post-reform experience that can be used to test the reform allowances made at the previous valuation, our approach has been to:

- Review our pre-reform estimated primary and combining Serious Injury numbers (Sections 5.2.2 and 5.2.3 respectively)
- Maintain our previous assumptions for the proportion of claims removed by the reform threshold change, and apply this to our latest estimates of pre-reform numbers (Section 5.2.4).

5.2.2 Primary injuries: pre-reform

Unless otherwise noted, this section relates to claimants who reach the Serious Injury threshold on their primary injury before reform impacts are considered (i.e. assuming a 30% threshold continues to apply).

Section 5.2.3 discusses claimants who are reliant on combining injuries to reach the Serious Injury threshold.

Identification of Serious Injury claims

Table 5.2 lists the sources used to identify Serious Injury claims for the valuation, along with commentary about the status of claims in each of those sources. The same process is used to identify both primary and combining Serious Injury claims.

Table 5.2 – Serious Injury sources

Source	Commentary
Serious Injury determinations	Claims are identified in this source following a formal Serious Injury determination. This decision cannot be reversed.
Serious Injury interim determinations	Claims are identified in this source following a Serious Injury interim determination. Serious Injury interim determinations provide access to Serious Injury benefits for claims who ReturnToWorkSA deems as likely to reach the Serious Injury threshold, but who cannot have a WPI assessment at this point (due to reasons such as not being at maximum medical improvement). It is possible that some claims in this cohort ultimately won't reach the Serious Injury threshold when their WPI is completed; however, given ReturnToWorkSA only make interim determinations where there is strong evidence to support a WPI that will meet the Serious Injury threshold, we expect most claims will ultimately be determined as a Serious Injury.
Other sources	Most claims identified through other sources have some lump sum information that indicates they would have reached the Serious Injury threshold; however, the majority of these claims relate to older accident periods (2013 and prior) and had disengaged from the Scheme prior to the commencement of the RTW Act and so will never have a formal Serious Injury determination. There is a small cohort of claims from RTW Act periods with some WPI information on file that indicates a WPI of at least 30%, but the WPI is not formally approved or is in dispute. Once the WPI information is finalised they will have their Serious Injury determinations.

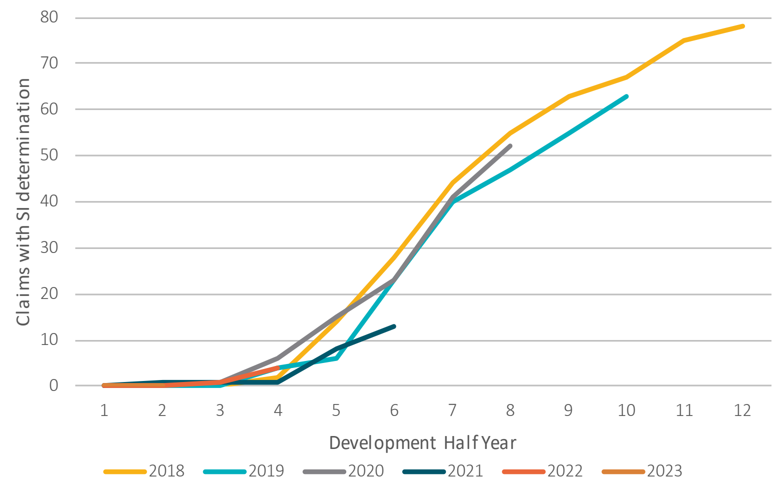
At previous valuations manual reviews by ReturnToWorkSA's operational team were used to identify 'potential' Serious Injury claims prior to a formal determination. Given the long delay between accident and Serious Injury determination, this was necessary in early years of the Return To Work Act as historical patterns could not be used to estimate the ultimate number of Serious Injury claims. As we are now eight years into the Return To Work Act, we consider there to be sufficient experience to estimate ultimate claim numbers using standard actuarial techniques, and so we are no longer incorporating file review work in estimating Serious Injury numbers.

Recent experience

Since the RTW Act commenced there has been continued 'late emergence' of Serious Injury claims well beyond the two year Income Support benefit period. Given the significant cost associated with Serious Injury claims, this has been a source of financial strain to the Scheme over time.

Figure 5.5 shows the delay to first determination of primary Serious Injury claims for 2018 and more recent accident years.

Figure 5.5 – Serious Injury emergence (primary Serious Injury claims only) for recent accident years



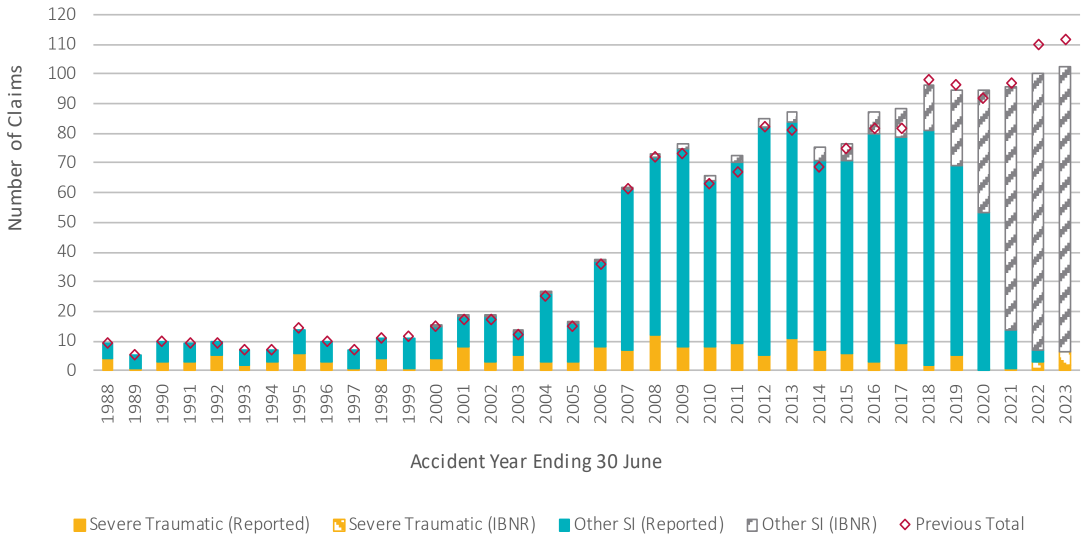
This highlights the significant delay between the injury and determination, with more than half the claims having their determination more than three years post accident. We also make the following observations:

- The 2018 to 2020 accident years have emerged at a similar pace, although 2018 has consistently been slightly higher at similar durations.
- To date, 2021 is emerging at a lower level; however, given the significant delay between accident and Serious Injury determination it is still highly uncertain whether this lower initial experience will translate to a lower ultimate number of Serious Injury claims. We note that RTW rates began to improve in the 2021 accident year, after a period of poorer performance from 2018 to 2020, and it is possible that is starting to translate to lower Serious Injury numbers.

Estimated ultimate numbers

Figure 5.6 shows our estimated pre-reform primary claim numbers by year.

Figure 5.6 – Serious Injury claim numbers (primary Serious Injury claims only) by accident year



The key features we note from this are:

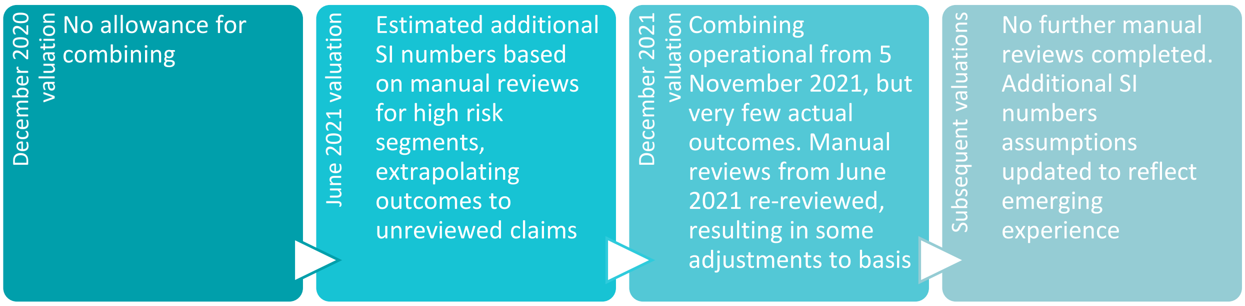
- The number of identified Serious Injury claims prior to 2007 is low, which is a result of past redemption activity removing such claims from the scheme.
- For Severe Traumatic Injuries, which tend to be identified quickly, the estimates for each accident year generally give credibility to experience to date. The 2018, 2020, 2021 and 2022 years look like being very low years for Severe Traumatic Injuries, whereas 2017, 2019 and 2023 look higher – although they are still lower than the average of the 2007 to 2013 years.
- Other Serious Injury claims have increased marginally for 2009 to 2017. This is a combination of claims emerging in the last six months, as well as an increase in our allowance for Serious Injury determinations that occur more than seven years post accident, in response to emerging experience.
- The reduction for 2022 and 2023 reflects the fact that it is now clear that the significant increase in wages for these years has not resulted in a commensurate increase in claims who access Income Support benefits. In line with the reduction in Income Support claims as a proportion of wages, we now also project a slightly lower Serious Injury claim frequency for 2022 and 2023 relative to 2021 and prior accidents.

5.2.3 Combining injuries: pre-reform

Recap and approach

Figure 5.7 summarises the approach to allowing for Serious Injury combining claims at each valuation from December 2020 to June 2023.

Figure 5.7 – Timeline of combining Serious Injury valuation

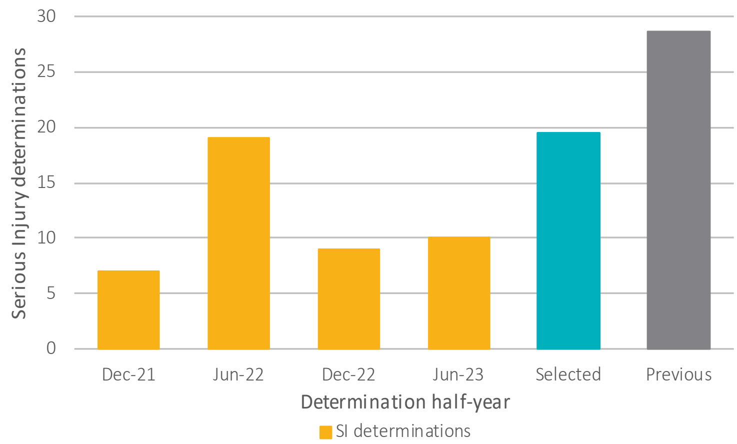


As for the previous valuation, we have continued to gradually respond to emerging experience.

Experience to date

Figure 5.8 below shows the total number of combining Serious Injury claims by determination half-year, along with how this compares to our current and previous ultimate expected combining Serious Injury claims.

Figure 5.8 – Combining related Serious Injury claims to date

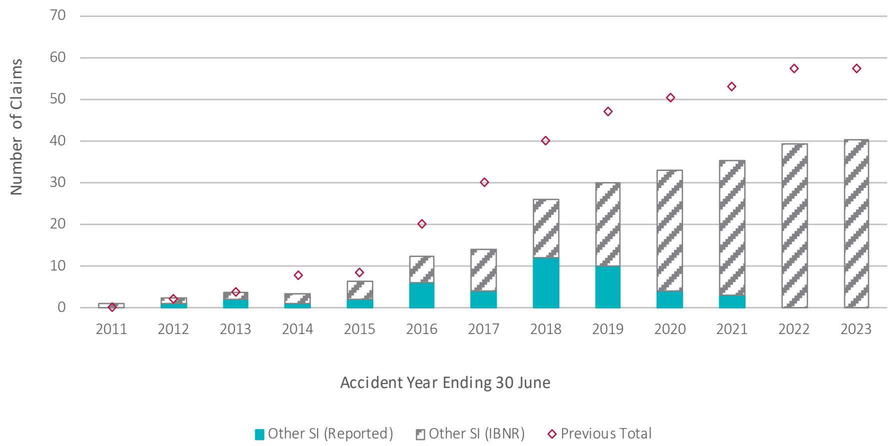


Combining Serious Injury claim numbers continue to emerge at lower than anticipated levels, and we have again gradually responded to this experience. As discussed at previous valuations, and consistent with the observations in section 4.4.1, claimants appear to have a preference for achieving a WPI score that is slightly below the Serious Injury threshold, which allows access to a high future economic loss lump sum payment, rather than the lifetime Serious Injury benefit package; please refer to our previous report for more detail.

Estimated ultimate numbers

Figure 5.9 shows our previous and current estimated additional Serious Injury claims due to combining.

Figure 5.9 – Estimated additional Serious Injury claims due to combining



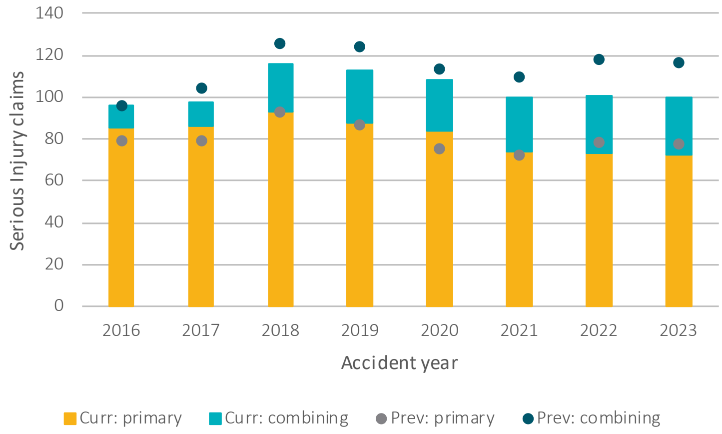
As noted above, we have again reduced our expected Serious Injury combining numbers in response to emerging experience.

5.2.4 Serious Injury Claims – expected reform impact

As discussed in Section 5.2.1, very few claims have as yet been assessed under the 35% WPI Serious Injury threshold, so we cannot test our previous valuation assumptions regarding the impact of the threshold change. We therefore continue to adopt the same percentage reduction in ultimate claim numbers as at the previous valuation. For additional detail on our reform approach and allowances for the Serious Injury threshold change please refer to our June 2022 report.

Figure 5.10 shows our projected post-reform ultimate Serious Injury claim numbers, which combines our revised pre-reform estimates with the assumed reduction due to the threshold change from the previous valuation.

Figure 5.10 – Projected post-reform ultimate claim numbers

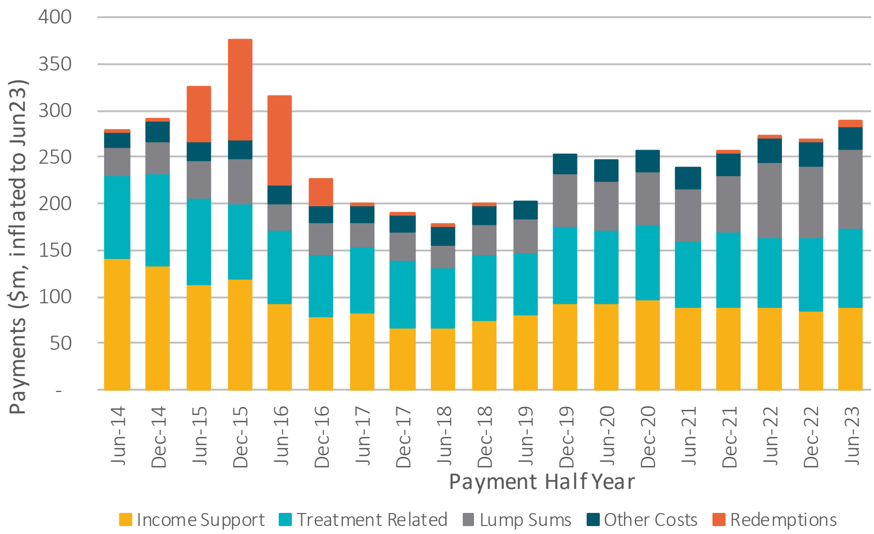


Given we assume the same threshold impact as the previous valuation, changes to post-threshold claim numbers reflect the changes to pre-threshold change claim numbers as described above.

5.3 Overall payment experience

Figure 5.11 shows gross claim payments (before recoveries) in half-yearly periods over the last ten years, inflated to current values.

Figure 5.11 – Gross Claim Payments ($Jun23)



Gross payments of $289m in the last six months were 7% higher than the previous period. The movements at payment type level were:

- Income Support payments were up 4% over the past six months, following a 6% reduction in the previous six months period. Improvements in RTW rates were offset by higher claims volume.
- Treatment related costs increased by 8% following a 5% increase in the previous six month period. There was increased spending across all treatment related costs, with hospital being the standout at 20% higher than the previous six months.

- Lump sum payments increased by 10%, driven by a large number of payments as result of high dispute settlement activity over the last six months.

After allowing for recoveries of $10m in the last six months, net claim payments of $278.8m were $7.8m (3%) higher than projected at the previous valuation. Table 5.3 shows the breakdown.

Table 5.3 – Payments: actual vs expected

Entitlement	Six Months to Jun-23				Split by Category	
Group	Actual	Expected	Act - Exp	% A - E	Short Term	Serious Inj
	$m	$m	$m		$m	$m
Income support	87.8	89.5	-1.7	-2%	0.2	-1.8
Redemptions	6.6	5.1	1.5	29%	1.9	-0.4
Lump sums	84.3	81.6	2.7	3%	2.5	0.2
Legal - Non-contract	11.7	11.2	0.5	4%	0.2	0.3
Contract Legal	10.9	12.2	-1.3	-11%	-0.6	-0.8
Medical	36.4	33.7	2.7	8%	2.9	-0.2
Allied Health	16.6	15.2	1.4	9%	1.0	0.3
Hospital	11.9	9.6	2.3	23%	1.9	0.4
Travel	3.5	3.0	0.5	17%	0.5	0.0
Rehabilitation	5.6	5.0	0.5	11%	0.5	0.0
Investigation	1.0	1.1	0.0	-4%	0.0	0.0
Other	2.4	2.0	0.4	18%	-0.1	0.5
Care	7.7	7.6	0.1	1%	0.1	0.0
Common law	0.0	0.1	-0.1	-100%	-0.1	0.0
LOEC	0.1	0.1	0.0	1%	0.0	0.0
Commutation	0.2	0.4	-0.2	-55%	-0.2	0.0
All Payments	286.6	277.5	9.1	3%	10.5	-1.4
Recoveries	-9.9	-8.6	-1.3	15%	-2.6	1.3
Net Payments	276.7	268.8	7.8	3%	7.9	-0.1

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

- Income support payments were below expected, following further improvement in RTW outcomes and fewer than expected new Serious Injury claims.
- Redemptions were higher than expected which we have interpreted as largely a timing issue.
- Lump sum payments were higher than expected, particularly for the 2019 and 2020 injury years.
- Legal costs were marginally lower than expected overall, due to lower Corporation legal spending. Partially offsetting this was higher than expected non-contract (i.e. worker) legal costs, due to a large volume of disputes resolved in the last six months.
- Treatment costs were higher than expected across all benefit types.

Our valuation basis for General Short Term Claims is discussed in Section 6, and Hearing Loss claims in Section 7. Section 8 discusses our valuation of Serious Injury claims.

6 'General' Short Term Claims

The following section summarises the Short Term Claims results for all claims other than Hearing Loss claims; we refer to these as "General Claims". Hearing Loss claims are separately identified in Section 7.

6.1 Valuation approach

6.1.1 Income Support

Income support payments are modelled separately for physical trauma, mental injury, musculoskeletal and other injuries; this approach 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.

IS payments in the first three years after injury are valued using a PPAC model. For payments beyond three years after injury, a PPCI model is used. The Income Support liability includes payments to dependants, back-pay and Income Support payments for late surgeries.

6.1.2 Lump Sums

We value lump sums in three segments: Non-Economic Loss, Economic Loss and Death benefits. The *Sustainability Act* changed the Serious Injury threshold from 30% to 35% for physical injuries, which will result in additional lump sums being paid as 'General' Short Term Claims compared to historical periods.

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 in recent years.

An allowance has also been made for an increase in the average size of lump sums over time due to behavioural changes leading to higher WPI scores. We have incorporated this higher average size into the selections as well as an allowance for future superimposed inflation.

More information on these methods is provided in Appendix A.

6.1.3 Legal and Treatment Related Costs

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 and medico-legal costs (for example related to medical assessments for WPI). Our modelling approach captures these features using:

- Long term model (PPCI) – this is a quarterly model used for the valuation of all treatment and Worker Legal liabilities.
- In some cases, we have shown two sets of valuation assumptions, namely:
  - "RTW Act claims" - claims occurring after the RTW Act commenced on 1 July 2015.
  - "Transitional claims" – those that occurred prior to 30 June 2015. These selections generally only apply for a small number of quarters before reverting to the "RTW Act claims" selections.

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

6.2 Short Term Claims – General Claims Results

This section summarises the results across the General Short Term Claims.

Table 6.1 – Short Term Claims: General Claims results

	Income Support	Lump sum	Worker Legal	Contract Legal	Medical	Allied Health	Hospital	Rehab	Travel	Other	Care	Rest[1]	Recoveries	Total General Claims
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
Estimated liability at Dec-22	157.6	459.2	66.2	40.6	69.9	27.0	16.7	11.4	5.8	4.7	2.0	9.7	(38.8)	832.0
Projected liability at Jun-23	159.1	470.8	66.0	40.6	70.5	27.3	17.1	11.5	5.9	4.7	2.0	9.1	(39.1)	845.6
Jun-23 valuation														
performance	(4.7)	18.4	(1.3)	(0.2)	7.0	2.8	0.9	0.3	0.5	(0.1)	0.2	(0.0)	(1.3)	22.5
Movement in liability due to reform														
Estimated liability at Jun-23 (Dec-22 ecos)	**154.4**	**489.1**	**64.7**	**40.4**	**77.6**	**30.1**	**17.9**	**11.9**	**6.4**	**4.6**	**2.2**	**9.1**	**(40.4)**	**868.1**
Impact of change in economic assumptions	(1.5)	(3.6)	(0.5)	(1.1)	(0.5)	(0.2)	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)	0.4	(7.2)
Estimated liability at Jun-23 (Jun-23 ecos)	**153.0**	**485.5**	**64.2**	**39.3**	**77.1**	**29.9**	**17.9**	**11.8**	**6.3**	**4.6**	**2.2**	**9.1**	**(40.0)**	**860.9**
AvE payments - six months to Jun-23	0.2	(0.4)	0.0	(0.7)	2.4	0.8	1.9	0.5	0.4	(0.1)	0.1	1.6	(2.5)	4.1
Actuarial release at Jun-23	**4.5**	**(18.0)**	**1.3**	**0.9**	**(9.4)**	**(3.6)**	**(2.7)**	**(0.8)**	**(0.9)**	**0.2**	**(0.3)**	(1.6)	**3.9**	(26.6)

[1] Rest includes: Investigation, Commutation, Common Law and LOEC

At a total level, there is an actuarial strengthening (cost increase) of $26.6m for the General Short Term Claims valuation (this increases to $34.9m after including expenses, as shown in Section 10.3). This comprises an increase of $22.5m in the liability estimate and $4.1m of higher payments than expected over the past six months. The key movements in the liability estimate are:

- Income Support – an actuarial release of $4.5m, due to further recognition of the improvement in RTW outcomes.
- Lump Sums – an actuarial strengthening of $18.0m which can be attributed to:
  - An $11m increase due higher than expected numbers of claims receiving a lump sum, particularly in the 2019 to 2021 accident years.
  - A $9m increase due to a higher allowance for the number of future 30-34% WPI lump sums as fewer claims are now expected to reach the Serious Injury claim WPI threshold, and instead will remain as a Short Term Claim. This shift in claim 'buckets' results in a net release in the overall liability provision, as the savings on Serious Injury claim numbers (see section 8) significantly outweigh the additional Short Term Claim lump sum costs.
- Medical - an actuarial strengthening of $9.4m, or a 9% increase in the liability. This reflects higher average payment sizes, with the increase seen across all three subcategories of medical reports, medical services and medical aids and appliances.
- Allied Health – an actuarial strengthening of $3.6m, or a 10% increase in the liability, which follows the use of a wider range of allied health programs to support return to work.
- Hospital - an actuarial strengthening of $2.7m, or a 5% increase in the liability which follows higher average payment sizes.
- Recoveries – an actuarial release of $3.9m reflecting higher than expected recoveries over the last six months along with our valuation response.
- The movements in the remaining benefit groups are small and add up to an actuarial release of $0.4m. Of this, $2.3m of release relates to legal costs, and a $1.6m strengthening relates to 'Rest', which is primarily the actual redemption payments made in the period.
- Movements due to economic assumptions result in a $7.2m reduction in the liability.

Table 6.2 below shows the actuarial release for Short Term Claims by accident period.

Table 6.2 – Short Term Claims: actuarial release by accident period

Accident Period	Income Support	Lump Sum	Worker Legal	Medical	Allied Health	Hospital	Rehab	Travel	Other	Care	Rest[1]	Redemptions	Recoveries	Total excl. Contract Legal	Contract Legal	Total incl. Contract Legal
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
Pre Jun-15	0.5	1.2	0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	0.3	0.2		
Jun-16	-0.4	0.1	-0.6	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	-0.3		
Jun-17	0.2	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	-0.8		
Jun-18	0.3	-3.3	0.2	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.3	-3.5		
Jun-19	0.2	-8.7	0.1	-0.5	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-9.0		
Jun-20	-0.4	-9.4	0.4	-0.9	-0.2	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0	-0.1	-10.7		
Jun-21	-0.5	-4.0	0.8	-1.5	-0.5	0.0	0.1	-0.1	0.0	-0.1	0.0	0.0	1.1	-4.7		
Jun-22	2.5	3.6	0.2	-1.8	-0.8	-0.2	-0.1	-0.1	0.2	-0.1	0.0	0.0	0.5	4.0		
Jun-23	2.1	4.5	0.0	-4.3	-1.9	-2.3	-0.9	-0.6	0.0	-0.1	0.1	0.0	0.7	-2.7		
Total	4.5	-18.0	1.3	-9.4	-3.6	-2.7	-0.8	-0.9	0.2	-0.3	0.3	-1.9	3.9	-27.5	0.9	-26.6

1 Rest includes: Investigation, Commutation, Common Law and LOEC

The movement for lump sums is concentrated around the 2017 to 2021 accident years, which results because the current valuation basis does *not* fully extrapolate the deterioration on lump sums into more recent injury periods. That is, the valuation basis gives weight to the improvements in RTW outcomes that has led to lower Income Support costs in the 2022 and 2023 accident years, to flow through to better lump sum outcomes. For more recent accident years, where more costs are for Medical and Allied Health, the increases are due to higher utilisation of these benefits along with a slightly higher volume of claims.

Additional detail is provided on the valuation basis for the significant benefit types in the remainder of Section 6. For benefit types where there is less than $10m in liabilities we have included the detailed assumptions in Appendix A; this covers Travel, Other, Care, Investigation, Common law, LOEC and Commutations.

6.3 Income support

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

6.3.1 Summary of results

Table 6.3 summarises the movements in our liability estimates for IS payments since the previous valuation.

Table 6.3 – Valuation Results: Income Support

Dec-22 Valuation	$m	$m	$m
Estimated Liab at Dec-22	157.6		
Projected Liab at Jun-23	159.1		
Jun-23 Valuation		AvE pmts	Actl Release
Movement in liability due to claims performance	(4.7)	0.2	4.5
Estimated Liab at Jun-23 (Dec-22 eco assumptions)	**154.4**		
Impact of change in eco assumptions	(1.5)		
Estimated Liab at Jun-23 (Jun-23 eco assumptions)	**153.0**		

At June 2023 there is an actuarial release of $4.5m, reflecting the claims experience since December 2022 and our valuation response. The impact of economic assumptions is small.

6.3.2 Experience vs expectations

Payments

Table 6.4 compares the IS payments in the six months to 30 June 2023 with the expected payments from our December 2022 valuation projection.

Table 6.4 – Actual vs Expected Payments: IS

Accident Period	Payments in Six Months to Jun 23			
	Actual	Expected	Act - Exp	Difference
	$m	$m	$m	
To 30 Jun 05	0.2	0.3	(0.1)	-46%
2005/06 - 2014/15	0.4	0.7	(0.3)	-45%
2015/16 - 2019/20	3.2	3.1	0.1	3%
2020/21 - 2021/22	32.6	32.8	(0.2)	-1%
2022/23	27.6	26.9	0.7	3%
Total	63.9	63.8	0.2	0%

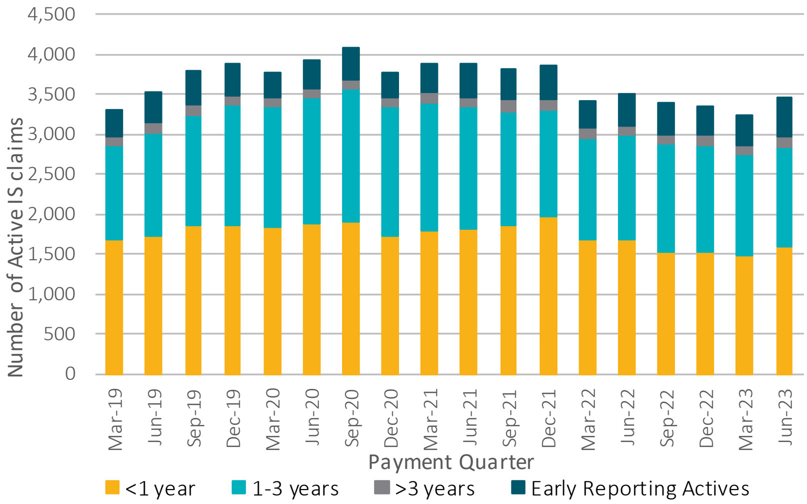
IS payments were $0.2m (0%) higher than expected overall in the six months to June 2023. This was due to:

- $0.5m (1%) higher payments for 2020/21 and later periods, where improvement in RTW rates were offset by higher claim volumes than expected in the 2022/23 accident year.
- $0.3m (8%) lower payments across the 2015/16 and prior accident years (periods which largely relate to surgery, late incapacity and dependent benefits).

Active claims and exits

Table 6.1 shows the numbers of (quarterly) active IS claims, split by duration.

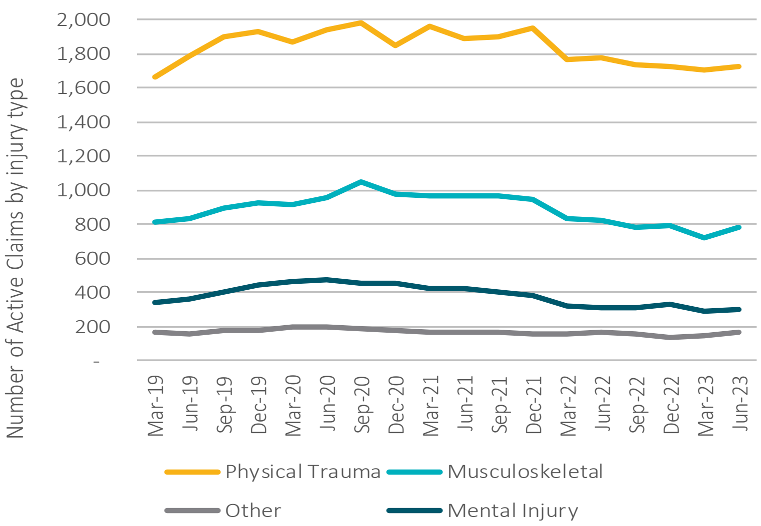
Figure 6.1 – Numbers of Active IS Claims



Since a step reduction in active claims in March-22, active claim volumes have remained below 3,500 as a result of improving return to work rates. Actives are higher in the Jun-23 quarter, reflecting higher claim volumes in the newest accident period; this is not unexpected after the very high growth in insured wages in the last two years.

Figure 6.2 shows the numbers of (quarterly) active IS claims, split by injury type.

Figure 6.2 – Number of Active IS Claims (excluding early reporting) by injury type and injury quarter



The step reduction in March-2022 was seen across physical trauma, musculoskeletal and mental injury types.

In Table 6.5 we compare the numbers of active IS claims at June 2023 with our December 2022 valuation projection. This has been done only for periods where we projected future active claims (accident quarters September 2020 and later). Overall active claim numbers were below expectations, with higher than expected new 10 day claims in the most recent accident periods offset by improving RTW rates seen in the accident periods one to two years post injury. As noted above, an increase in the number of 10 day claims is not unexpected with the significant growth in wages.

Table 6.5 – AvE Active Claims

Accident Quarter	Proj from Dec-22 Val	Actual Actives	Act *less* Proj	Diff as % Proj
Sep-20	18	28	10	53%
Dec-20	26	33	7	27%
Mar-21	70	70	0	0%
Jun-21	205	199	-6	-3%
Sep-21	226	220	-6	-3%
Dec-21	217	209	-8	-4%
Mar-22	254	238	-16	-6%
Jun-22	271	243	-28	-10%
Sep-22	339	337	-2	-1%
Dec-22	478	450	-28	-6%
Mar-23	607	638	31	5%
Jun-23	183	174	-9	-5%
Total	2,894	2,839	-55	-2%

6.3.3 Valuation basis: IS payments in years 1-3: PPAC model

Projection of active claims

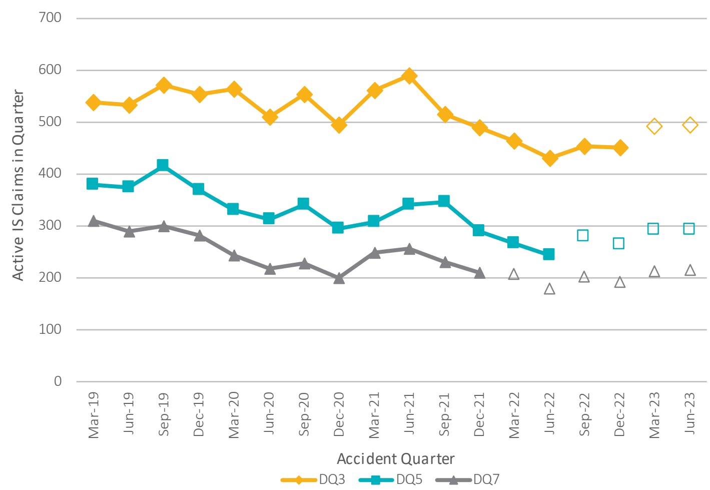
Figure 6.3 shows the combined continuance rates compared to those selected at December 2022.

Figure 6.3 – Continuance rates – implied overall assumptions

The overall average continuance rates for development quarters 3 to 9 are lower at this valuation, following the improvement in RTW outcomes over the last two years.

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

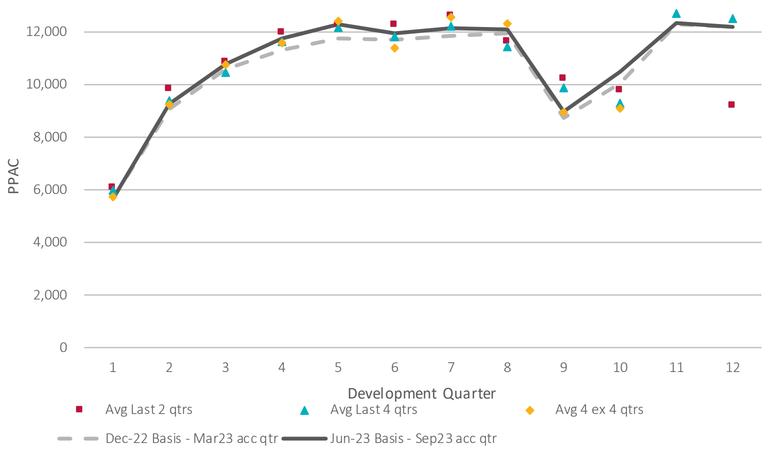


As Figure 6.4 shows, our projections are that active claim numbers at DQ7 have reached a new low level and will remain broadly flat hereafter (unless further improvements in RTW are achieved, that is). The higher volume of actives in recent accident periods flows through to a higher DQ3 active projection.

Payments per active claim

Figure 6.5 shows the implied average payment size across all injury types.

Figure 6.5 – Payments per active claim ($Jun-23): implied overall assumption



The recent overall PPAC experience is emerging slightly higher than our December 2022 basis, and we have responded with increases in our adopted PPACs as shown.

6.3.4 Valuation Basis: IS payments after year 3: PPCI model

IS payments after 3 years are modelled using a PPCI model based on the ultimate number of claims (excluding Hearing Loss). The overall adopted average PPCI size of $553 per reported claim is unchanged other than inflation from the December 2022 assumption and made up of two components:

- The allowance for ongoing dependant benefits of $190 per reported claim
- 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 $363 per reported claim.

Details of the valuation basis can be found in Appendix A.

6.4 Lump sums

This section describes our valuation of lump sum payments for General Short Term claims. A lump sum is payable to a worker who suffers a compensable injury that results in at least 5% whole person impairment (WPI). Separate Lump Sums compensate claimants for non-economic loss and future economic loss, with compensation for future economic loss only available to claims with injuries from 1 July 2015.

We value these lump sums in three segments:

- "Death" and funeral claims
- "Non-Economic Loss" lump sums[4] – where a claimant receives their first lump sum payment for the relevant claim (excluding Death 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 (only available under the RTW Act to new injuries from 1 July 2015, and subject to deductions for previous Economic Loss lump sum payments).

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

[4] Payments for "Top Up" lump sums were previously separated out, but now that very few such claims remain (all of which are claimants with injury dates prior to 1 July 2015 who lodged an application prior to 30 June 2016) this has been combined into the Non-Economic Loss model.

6.4.1 Summary of results

Table 6.6 summarises the movements in our liability estimates for lump sum payments since the December 2022 valuation.

Table 6.6 – Valuation results: lump sums

Dec-22 Valuation	$m	$m	$m
Estimated Liab at Dec-22	459.2		
Projected Liab at Jun-23	470.8		
Jun-23 Valuation		AvE pmts	Strengthening
Movement in liability due to claims performance	18.4	(0.4)	(18.0)
Estimated Liab at Jun-23 (Dec-22 eco assumptions)	**489.1**		
Impact of change in eco assumptions	(3.6)		
Estimated Liab at Jun-23 (Jun-23 eco assumptions)	**485.5**		

The June 2023 liability shows an actuarial strengthening of $18.0m since December 2022, reflecting an increase of $18.4m in the liability and $0.4m of lower claim payments. Changes to economic assumptions reduce the liability by $3.6m.

6.4.2 Payment experience

Table 6.7 compares the payments in the six months to June 2023 with the expected payments from our December 2022 valuation projection.

Table 6.7 – Actual vs expected payments: lump sums

Accident	Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Difference
	$m	$m	$m	
To 30 Jun 05	0.2	0.4	(0.2)	-46%
2005/06 - 2014/15	2.3	2.3	(0.1)	-2%
2015/16 - 2018/19	20.9	22.0	(1.0)	-5%
2019/20 - 2021/22	29.1	27.6	1.5	6%
2022/23	1.2	1.8	(0.7)	-36%
Total	53.8	54.1	(0.4)	-1%

Payments were overall 1% lower than expected in the six months to 30 June 2023, with higher payments for 2019/20 to 2021/22 offset by lower payments for all other periods. The lower payments were driven by a combination of fewer death lump sums and lower than expected '30%-34%' lump sums post the 2022 reforms, the latter of which we interpret as a timing issue. Offsetting this were higher numbers of payments for both Non-Economic Loss and Economic Loss lump sums.

6.4.3 Non-Economic Loss lump sums

Our valuation basis adopts a combination of the chain ladder approach for more mature accident periods and a frequency-based approach for more recent accident periods where there is less experience and there have been changes in the pattern of payments. Table 6.8 below compares the actual and expected number of Non-Economic Loss lump sums paid in the six months to June 2023.

Table 6.8 – Actual vs expected numbers: Non-Economic Loss lump sums

Accident Period	Number of Payments in Six Months to Jun 23			
	Actual	Expected	Act - Exp	% Difference
To 30 Jun 05	13	15	-2	-13%
2005/06 - 2014/15	45	56	-11	-20%
2015/16 - 2018/19	200	153	47	30%
2019/20 - 2021/22	396	369	27	7%
2022/23	0	3	-3	-100%
Total	654	596	58	10%

The number of Non-Economic Loss lump sums in the last six months was 10% higher than expected. Higher numbers of claims were paid for the post RTW Act periods, partly offset by fewer transitional claim lump sums.

As a test of the reasonableness of our valuation basis for more mature accident years, Figure 6.6 below summarises a breakdown of open and 'potential' claims by their current status in the WPI assessment process (left-side bar) which is compared with the IBNR allowance for Non-Economic Loss lump sums (right-side bar) for each accident year up to 2020.

Figure 6.6 – Comparison of identified potential future lump sum claims and model IBNR allowance (for accident periods up to June 2020)

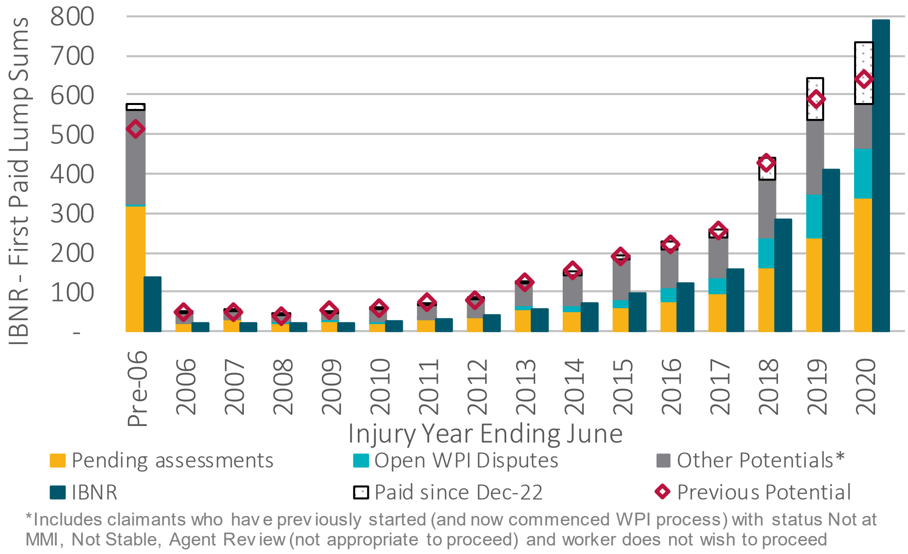


Figure 6.6 shows that:

- The number of identified potential future lump sum claims remained similar to six months ago for most injury years once actual payments are taken into account. This reflects an increased number of payments made in the last six months, offset by an ongoing inflow of new WPI applications which is particularly evident for the 2019 and 2020 years where the net movement in WPI applications is positive.
- Pre-2016 accident periods still 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 result in a WPI lower than 5% and therefore not be entitled to a lump sum payment.

> The selected basis allows for around 20% of currently pending and expected future assessments to be successful, consistent with the recent outcomes on transitional claims (slightly lower than the previous valuation).

The selected basis allows for around 88% of open disputes to result in a lump sum payment. This is higher than our previous allowance (75%), as recent dispute finalisations seem to be more often receiving a lump sum payment.

The higher number of payments made plus the ongoing inflow of new WPI applications means the volume of projected ultimate lump sum payments is now higher than previously expected for the 2017 to 2021 injury years, where we have added 190 extra lump sums.

Importantly, we are assuming that the higher numbers of lump sums for the 2018 and 2019 years (in particular) will not fully flow through to later injury years. This approach reflects a view that the different management approach that was in place for 2018 and 2019 claims (both for lump sum benefits and income support), as well as the relatively high volume of Income Support claims that reached longer durations on benefits for these years, are the main reasons for the higher lump sum volumes that have emerged for these injury years.

For the 2022 and 2023 years, we have put through a total reduction of 20 lump sums from the last valuation, giving further weight to the improved outcomes in RTW experience as evidenced by lower income support costs.

Figure 6.7 shows the projected ultimate numbers of Non-Economic Loss lump sums, split into paid and IBNR claims.

Figure 6.7 – Projected ultimate numbers of Non-Economic Loss lump sums

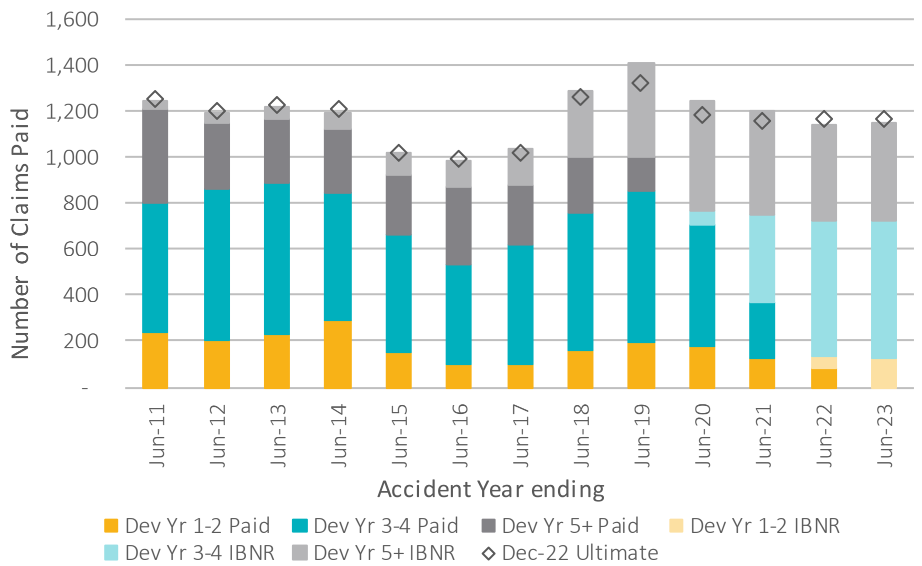


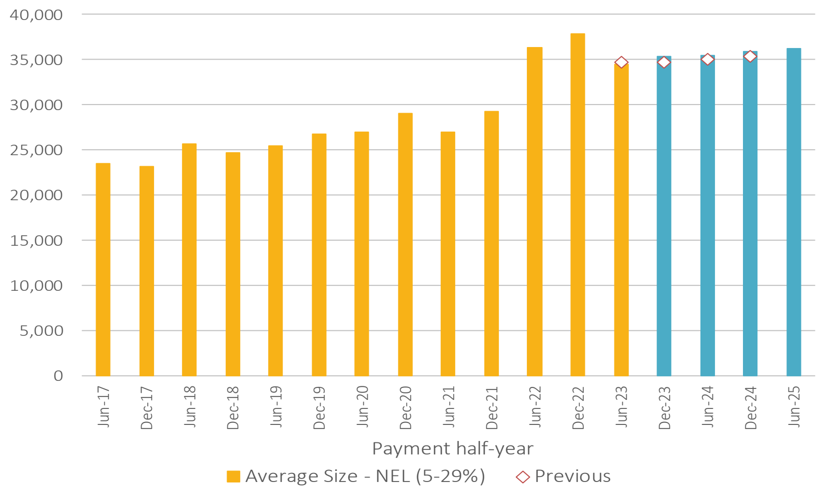
Figure 6.7 shows:

- The 2015 to 2017 years show the impact of the 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.
- The 2018 and 2019 accident years have noticeably higher ultimate claim numbers than other years, with the 2019 year increasing materially over the previous valuation due to the high number of open WPI assessments for this year.

- 2020 and later accident years are anticipated to have a lower volume of lump sums than 2018 and 2019, in line with the lower numbers of longer duration Income Support claims for these years.

Figure 6.8 below shows the actual and projected average payments for non-economic loss. To aid comparability we have not included our allowances for claims with WPI in the 30-34% range, as this group will act to progressively push up average sizes as they begin to get paid as Short Term Claims.

Figure 6.8 – Average payments Non-Economic Loss (NEL)



Average sizes emerged in line with expectations over the last six months, following a significant increase in sizes in the prior 12 months due to the introduction of combining injuries. At this valuation we have reshaped our average size pattern, resulting in a minor increase from the previous valuation basis.

As combining injuries are a relatively new feature of the scheme, our valuation basis includes a behavioural allowance (applied as superimposed inflation) of 0.5% p.a. to account for anticipated changes over time brought on by greater incentives to combine injuries under the reforms. This allowance is unchanged from the previous valuation.

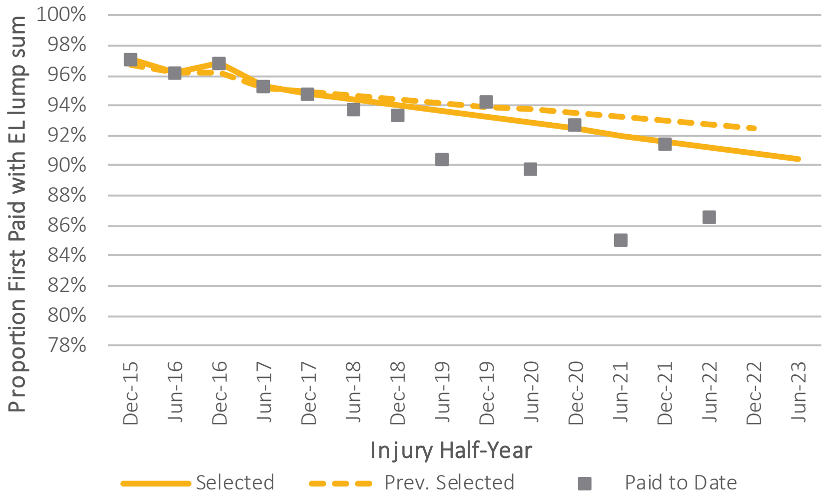
The assumed average size for NEL payments for WPI 30-34% is unchanged at this valuation and the handful of claims paid to date are consistent with our assumptions.

6.4.4 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 therefore available to injuries from 1 July 2015.

The numbers of future Economic Loss lump sum payments are modelled as a percentage of Non-Economic Loss lump sums. Only a small group of such claims are not entitled to an Economic Loss lump sum: namely, where the hours worked formula ends up being nil, or where deductions for prior Economic Loss lump sums paid to the worker reduce the payment to nil. Figure 6.9 below shows the number of Economic Loss lump sums paid to date as a proportion of Non-Economic Loss lump sums and our selections for each injury half-year.

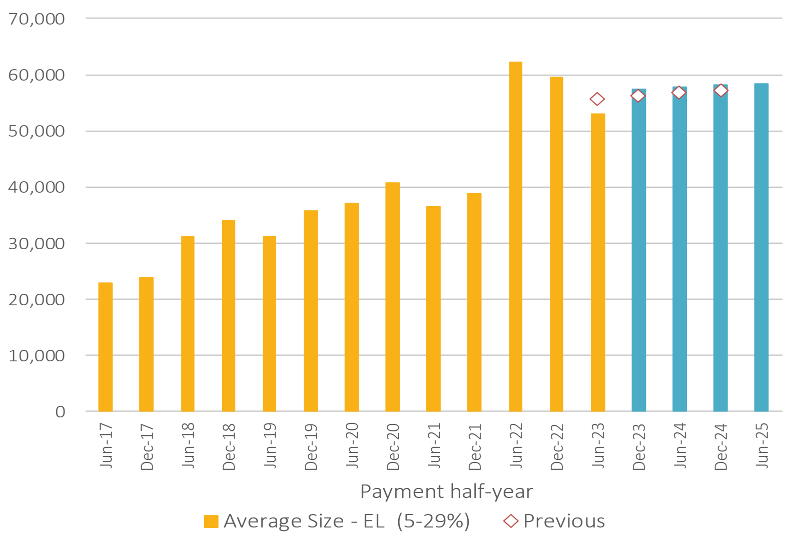
Figure 6.9 – Proportion of Non-Economic Loss lump sums receiving Economic Loss lump sum



We assume that 5.3% of claims from the 2018 accident year will not receive the Economic Loss lump sum, and our assumption increases linearly to 9.6% for the 2023 accident year. This is an increase from last year and gives further weight to the emerging experience. While our selected basis is still on the low side compared to the most recent payment experience, we do expect there to be significant development as later claims emerge for each injury years, and hence have not fully reflected the experience.

Figure 6.10 below shows the actual and projected average payments for economic loss lump sums; again, we have excluded our allowances for claims with 30-34% WPI to aid comparability.

Figure 6.10 – Average payments Economic Loss (EL)



Similar to Non-Economic Loss lump sums, the average claim size in the last six months dropped from the size in the previous 12 months period. At this valuation we have reshaped our average size pattern resulting in a minor increase from the previous valuation basis.

In addition, we include a behavioural allowance (applied as super imposed inflation) of 1% p.a. to account for changes brought on by greater incentives to combine injuries under the reforms, which is unchanged from the previous valuation.

The assumed average size for EL payments for WPI 30-34% is unchanged at this valuation.

6.4.5 Death lump sums

Death (and funeral) lump sum payment numbers were lower than expected. Overall significantly lower than expected payments are a result of a lower proportion of claims being paid full death benefits, with more claims than normal receiving just a funeral benefit.

Figure 6.11 shows the projected numbers of Death lump sums by accident year. We have reduced the numbers of expected payments in line with the experience.

Figure 6.11 – Projected ultimate numbers of death lump sums

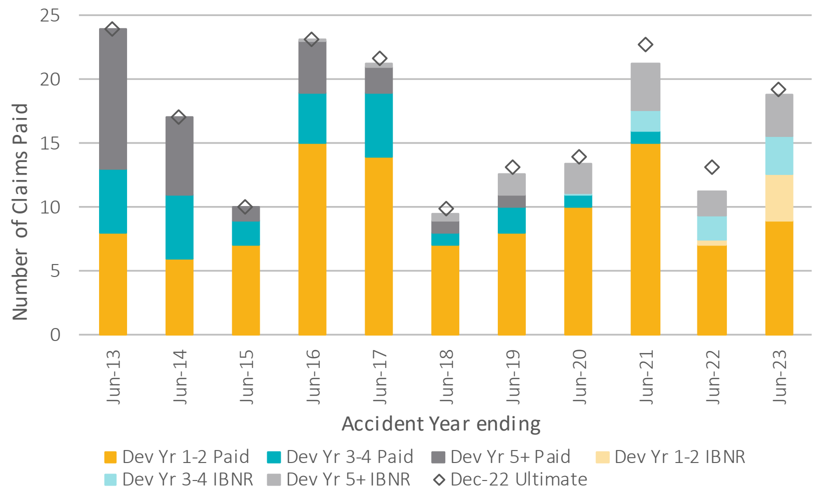
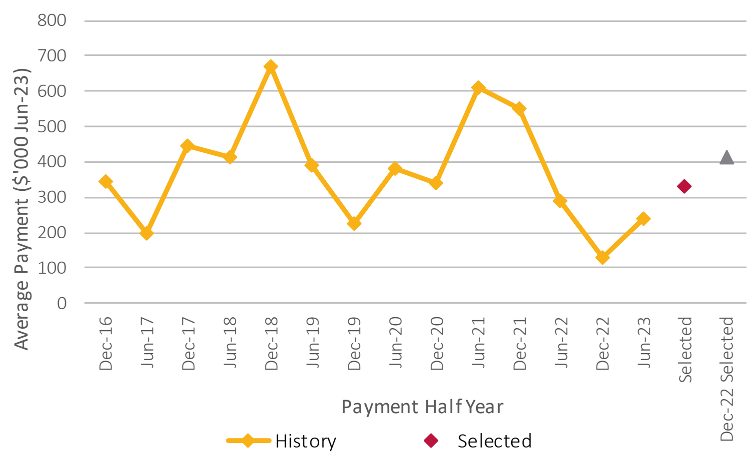


Figure 6.12 shows the average benefit paid to a Death lump sum claim, by payment half year.

Figure 6.12 – Average lump sum death payment ($Jun-23)



We have reduced our expected average size slightly, in response to the change in mix of payment types.

6.5 Treatment and related costs

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), Allied Health, Hospital, Rehabilitation (Vocational Rehabilitation). Medical payments are the most significant of these entitlements.

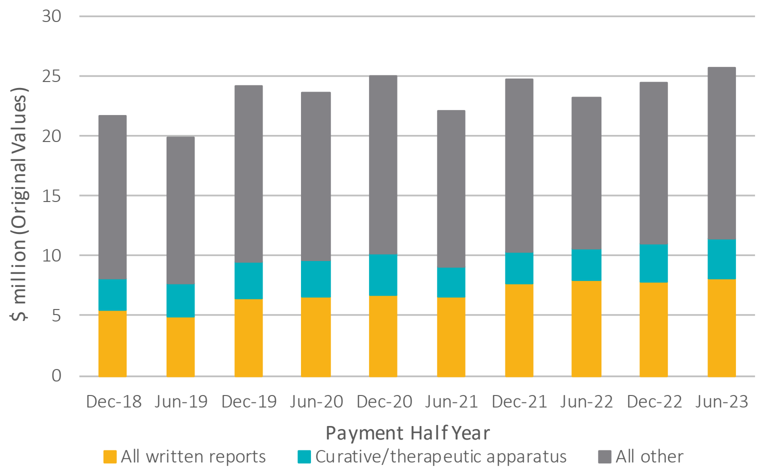
6.5.1 Medical

Medical payments include payments for treating doctors, written medical reports and therapeutic devices, including medico-legal costs.

Payments vs expectations

Figure 6.13 below shows medical payments by six-month period, split by the type of service.

Figure 6.13 – Medical half-yearly payments



Medical payments have remained high for the past four years. While the higher payments of late are evident across all the main types of services, written reports stand out as a consistent contributor to this experience; Appliances have had significant (proportional) growth in 2023 in particular. (note: the June 2021 half-year was impacted by payment delays which resulted in a subsequent 'catch-up' in payments for the December 2021 half-year.)

Table 6.9 shows that there were $25.6m in payments in the last 6 months which was 10% higher than expected. Tail claim payments were proportionately much higher than expected.

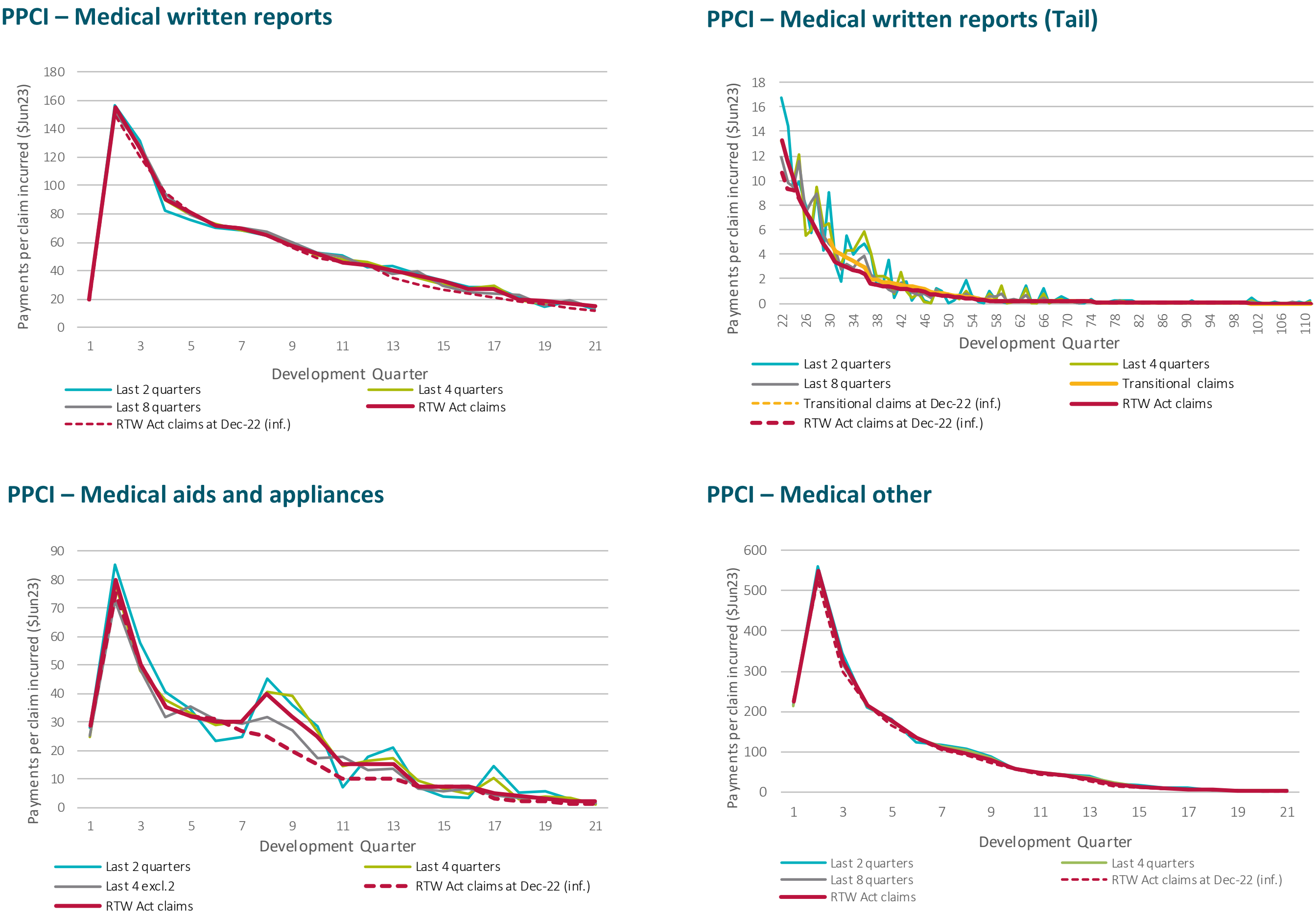
Table 6.9 – Medical AvE Payments

Accident	Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.1	0.1	0.0	31%
2005/06 - 2014/15	0.5	0.4	0.1	14%
2015/16 - 2019/20	4.0	3.0	0.9	31%
2020/21 - 2021/22	9.9	9.4	0.5	5%
2022/23	11.2	10.3	0.9	9%
Total	25.6	23.2	2.4	10%

Valuation basis

Figure 6.14 below shows the recent experience and selected basis for medical payments.

Figure 6.14 – Medical experience and selections



Our comments on the experience and selected assumptions are:

- PPCI (Medical written reports): the selected basis reflects the most recent experience, where costs associated with written medical reports have remained high. The main change is higher average costs in years two to five post injury.
- PPCI (Medical aids and appliances): the basis has been increased in years three to five post injury reflecting higher recent experience. The selected basis is aligned with the average last 4; we are unaware of the driver of increased appliances (noting these costs are for non-hearing loss claims, so this is not hearing aids).
- PPCI (Medical other): the selected basis is in line with the average of payments over the last 4 quarters; it is increased in line with the average last 4.

6.5.2 Allied Health

Allied Health relates to payments to Allied Health practitioners and includes physiotherapists, chiropractors, exercise physiologists, osteopathy, psychology, pharmaceuticals, dentist costs, remedial massage and speech pathology.

Payments vs expectations

Figure 6.15 compares actual and expected payments for Allied Health since the December 2022 valuation, which are 7% above expectation. We understand that ReturnToWorkSA have increased the use of allied health services in some areas, as part of targeted programs to improve RTW performance.

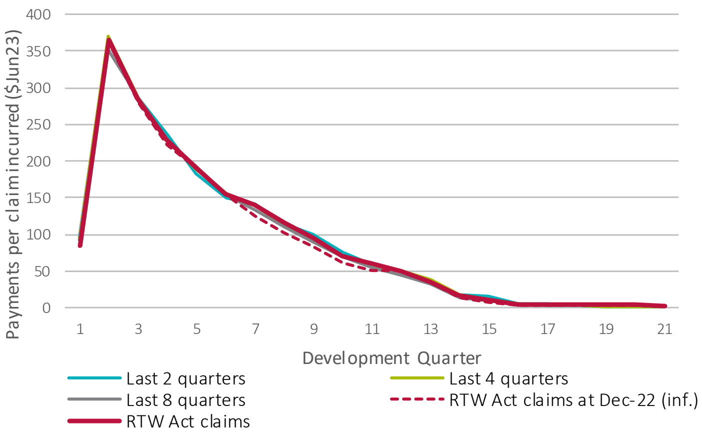
Figure 6.15 – Allied Health AvE payments

Accident	Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.1	0.0	0.1	525%
2005/06 - 2014/15	0.1	0.1	0.0	45%
2015/16 - 2019/20	0.8	0.7	0.1	14%
2020/21 - 2021/22	6.0	5.7	0.3	5%
2022/23	5.5	5.2	0.3	6%
Total	12.5	11.7	0.8	7%

Valuation basis

Figure 6.16 below shows the recent experience and selected basis for Allied Health payments. We have reflected the higher spend in our selected basis.

Figure 6.16 – Allied Health experience and selections



Our adopted basis at this valuation is consistent with the average of the last 4 quarters.

6.5.3 Hospital

Hospital payments include payments made to public and private hospitals.

Payments vs expectations

Table 6.10 below compares actual and expected payments for Hospital in the six months to June 2023, which are 22% above expectation.

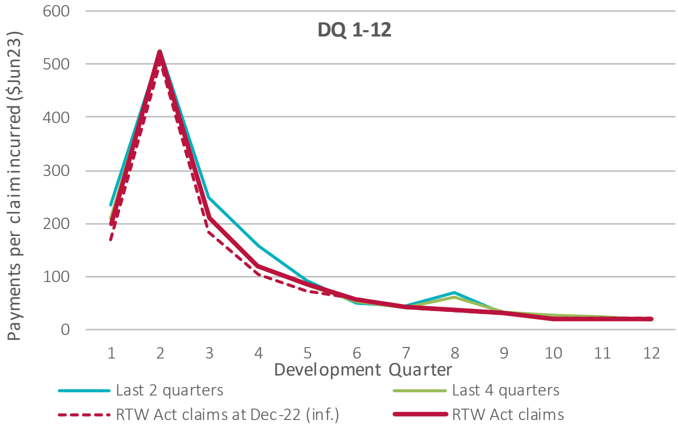
Table 6.10 – Hospital AvE payments

Accident	Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	(0.0)	-21%
2005/06 - 2014/15	0.1	0.1	0.0	49%
2015/16 - 2019/20	0.6	0.5	0.2	36%
2020/21 - 2021/22	2.4	2.2	0.2	10%
2022/23	7.1	5.6	1.4	25%
Total	10.3	8.4	1.9	22%

Valuation basis

Figure 6.17 below shows the recent experience and selected basis for Hospital payments. Payments are volatile in six month periods and we generally take a longer term view when selecting our assumptions for Hospital.

Figure 6.17 – Hospital experience and selections



The adopted basis is in line with the experience over the last four quarters.

6.5.4 Rehabilitation

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

Payments vs expectations

Table 6.11 compares actual and expected Rehabilitation payments in the six months to June 2023, which are 10% above expectation.

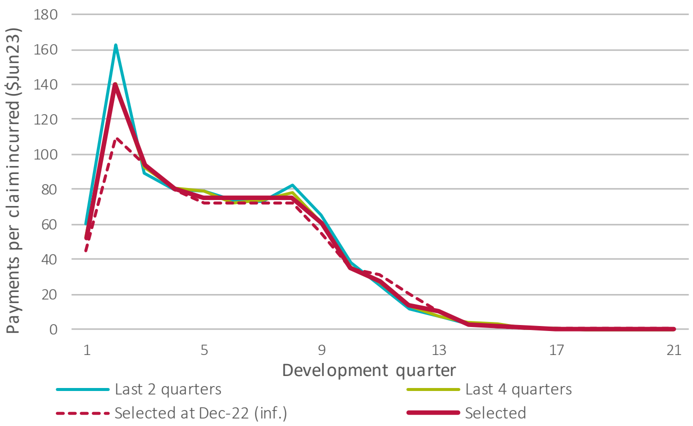
Table 6.11 – Rehabilitation AvE payments

Accident Period	Payments in Six Months to Jun 23			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.0	0.0	0.0	n/a
2005/06 - 2014/15	0.0	0.0	(0.0)	-100%
2015/16 - 2019/20	0.1	0.2	(0.0)	-13%
2020/21 - 2021/22	3.0	2.9	0.1	3%
2022/23	2.2	1.8	0.5	26%
Total	5.4	4.9	0.5	10%

Valuation basis

Figure 6.18 below shows the recent experience and selected basis for Rehabilitation payments. There has been increased utilisation of rehabilitation services for the most recent accidents.

Figure 6.18 – Rehabilitation experience and selections



The adopted basis is in line with the experience over the last four quarters.

6.6 Legal costs and Recoveries

This section presents results for legal costs and recoveries.

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'.

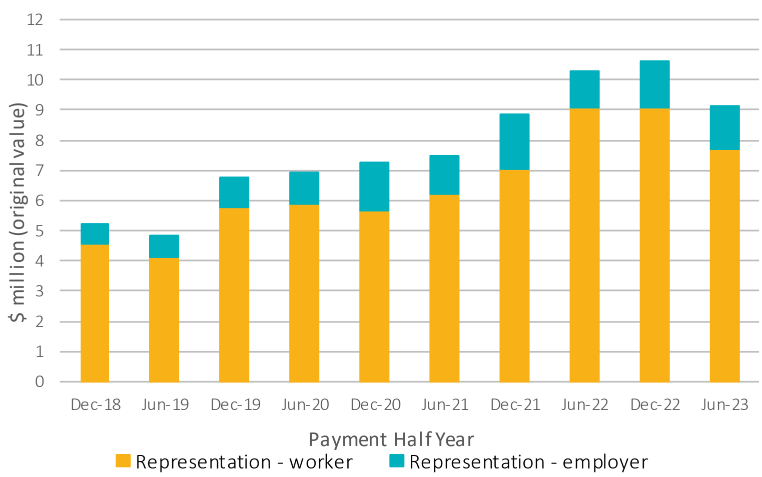
6.6.1 Worker Legal Costs

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.

Experience

Figure 6.19 below shows Worker Legal payments in each six-month period over the last five years.

Figure 6.19 – Worker Legal Half Yearly Payments



Worker Legal expenditure reduced to $9m in the six months to June 2023, from $11m in the six months prior. As the dispute resolution program continues to run, we expect payments to remain at an elevated level in the short term due to the increased closure rate for existing disputes. As discussed in Section

4.4.3 we are starting to see the large number of open disputes in the scheme reduce, with closures offsetting the (still high) number of new disputes received.

Table 6.12 below compares actual and expected Worker Legal payments by in the six months to June 2023 which are in line with expectations.

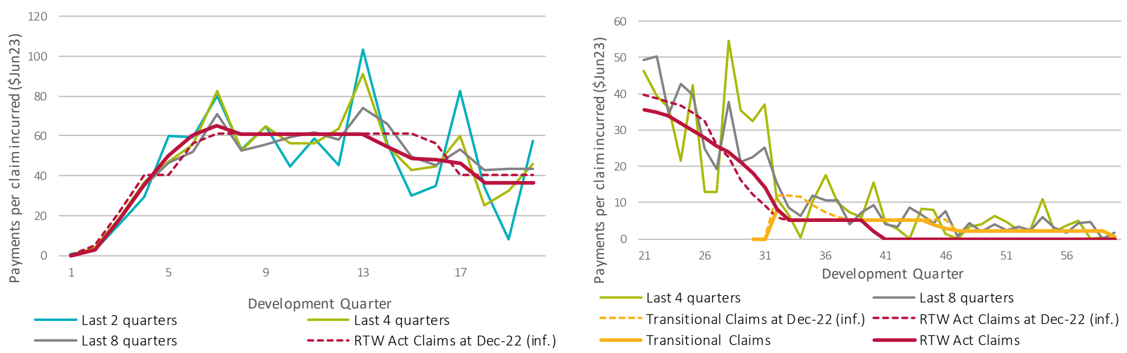
Table 6.12 – AvE Worker Legal Payments

Accident Period	Payments in Six Months to Jun 23			
	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	0.1	0.1	(0.1)	-54%
2005/06 - 2014/15	1.1	1.0	0.1	11%
2015/16 - 2019/20	4.9	4.8	0.1	2%
2020/21 - 2021/22	2.8	2.9	(0.0)	-2%
2022/23	0.2	0.3	(0.1)	-21%
Total	9.1	9.1	0.0	0%

Valuation basis

A PPCI model is used to value Worker Legal fees. Figure 6.20 below shows the recent experience and selected basis for Worker Legal payments.

Figure 6.20 – Worker Legal experience and selections



The selected RTW Act basis is consistent with the average experience over the last 4 quarters and is broadly a reshaping of the expected average size (the overall size is 3% lower than our previous valuation). Changes to the basis reflect a bringing forward of expected legal payments and align with ReturnToWorkSA's operational strategy to settle disputes faster where possible.

The transitional claims basis is unchanged from the previous valuation and is consistent with the level of payments observed over the last 8 quarters. This translates into a valuation estimate of around $7.0m (discounted) for Transitional Worker Legal costs and allows for:

- Some further progression of the currently 190 open disputes
- A further 500 new disputes to be lodged (at a lower cost) in relation to WPI assessments. There are currently 570 pending WPI assessments and an assumed 1,350 future assessments beyond this. The allowance of 500 implies a disputation rate of 25%, consistent with the recent experience for Transitional claims.

6.6.2 Corporation Legal

Corporation Legal refers to 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.

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.

Actual v Expected Experience

Corporation legals were $10.4m paid in the 6 months to June 2023 which was $0.7m lower than expected (-6%).

There continues to be high amounts of "non-contract" fees related to recovery activity, and a number of matters in the Supreme Court.

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 6.13 below summarises the payments applicable under the current contract.

Table 6.13 – Corporation Legal contract components

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

To project future Corporation Legal costs we have:

- Adopted the fixed monthly fees payable to each provider under the contract. The fixed fee is increased in accordance with the current contract, beyond which we have only allowed for fees to increase with CPI inflation, reflecting the relative stability in the contract costs to date despite increasing levels of disputes in the scheme, and noting that ReturnToWorkSA management are strongly of the view that these costs are not expected to increase at future contract renewals.
- 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.
- Allowed for payment of any performance fees as specified in the terms of the 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 $1.5m per half year is down from $1.9m at the previous valuation and reflects the lower recent payment experience as well as the smaller pool of open disputes.
  - An additional loading of $1m per year for the next 2 years and then $0.75m for the third year is included to allow for the resolution of Supreme Court matters.

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

The allocation of cash flows across accident periods is based on the observed experience in Worker Legal costs, with an adjustment to reflect the quicker payment pattern of Corporation Legal costs. 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.

6.6.3 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.

Experience

Table 6.14 below compares actual and expected Recovery payments in the 6 months to June 2023, which were 55% above expectation.

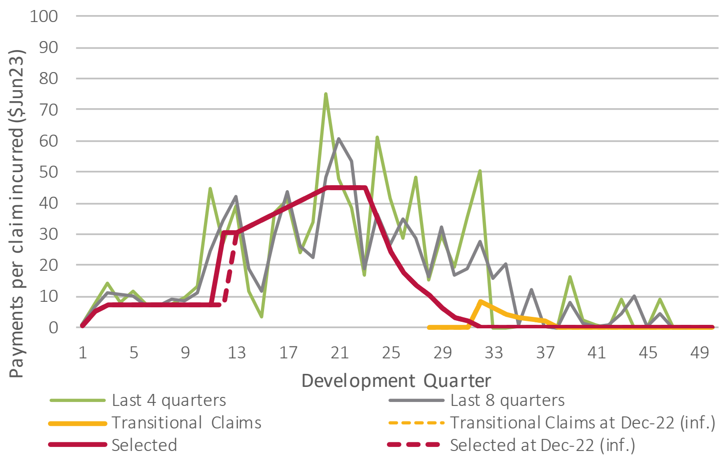
Table 6.14 – Recovery half yearly payments received

Accident	Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 05	(0.0)	(0.0)	0.0	-94%
2005/06 - 2014/15	(0.5)	(0.2)	(0.4)	209%
2015/16 - 2019/20	(5.1)	(3.9)	(1.2)	31%
2020/21 - 2021/22	(1.3)	(0.4)	(0.9)	226%
2022/23	(0.2)	(0.1)	(0.1)	88%
Total	(7.2)	(4.6)	(2.5)	55%

Valuation basis

A PPCI model is used for recovery payments. Figure 6.21 below shows the recent experience and selected basis. We note that for the Recoveries PPCI model, all Claims incurred is defined as all reports including Hearing Loss claims.

Figure 6.21 – PPCI experience and selections: Recoveries



There has been a minor refinement to the selected Recovery PPCI assumptions at this valuation. 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.

7 Noise Induced Hearing Loss Claims

Workers who suffer a compensable hearing loss injury are entitled to hearing aids and other treatment costs, and (depending on the assessed WPI) a lump sum payment.

7.1 Valuation approach

Our valuation of Hearing Loss claims builds up from our claim number projection for Hearing Loss claims, which were described in Section 5.1.1. The key features are:

- 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. In each case the projected proportions of claims who are projected to receive a lump sum are used as a 'sense check' on the projections.
- Medical Reports: there is a strong relationship between written report costs and the number of newly reported Hearing Loss claims (with a one quarter delay), and we use this to project future costs.
- Worker Legals: legal payments are primarily related to rejected claims that are disputing eligibility; Worker Legals tend to be paid at the resolution of the dispute, so our model links Worker Legals to the reported claims, with a delay to allow time for the dispute to resolve (average payments per yearly average of incremental reports, with a two quarter delay).
- Medical Aids and Appliances: Hearing Loss claims may incur regular replacement and repair costs for hearing aids, running for decades after the injury is initially reported. We use an average payments per claim incurred approach for these costs.
- Allied Health: these are mainly professional 'fitting fees' for the provision of hearing aids, and have a steady cost relationship with the device costs; we model these costs as a loading on the Medical Aids and appliances costs.
- Payments for other benefit types are minimal. Costs are projected in aggregate and allocated to the broader payment groups by selecting a percentage allocation to separate projected cash flows.

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

7.2 Summary of results

Table 7.1 summarises the liability estimates for Hearing Loss claims.

Table 7.1 – Valuation results: Hearing Loss claims

	Lump Sums	Medical	Allied Health	Worker Legals	Other Benefits[1]	Total
Dec-22 Valuation	$m	$m	$m	$m	$m	$m
Estimated Liability at Jun-22	48.0	70.4	17.3	9.3	2.1	147.1
Projected Liability at Dec-22	49.7	71.7	17.7	9.6	2.1	150.8
Dec-22 Valuation						
Movement in liability due to claims performance	2.8	18.5	6.5	(0.1)	0.8	28.6
Movement in liability due to reform						
Estimated liability at Jun-23 (Dec-22 ecos)	**52.5**	**90.2**	**24.3**	**9.5**	**2.9**	**179.4**
Impact of change in eco assumptions	(0.1)	0.5	0.1	0.0	0.0	0.6
Estimated liability at Jun-23 (Jun-23 ecos)	**52.5**	**90.7**	**24.4**	**9.5**	**2.9**	**180.0**
1 Rest includes: Travel, Investigation, Other						
AvE Payments	2.9	0.5	0.2	0.2	0.1	3.8
Actuarial Release/(Strengthening)	(5.6)	(19.0)	(6.8)	(0.1)	(0.8)	(32.4)

There is an overall actuarial strengthening of $32.4m for Hearing Loss claims (this increases to $37.7m after including expenses, as shown in Section 10.3). This is comprised of an increase of $28.6m in the liability estimate and $3.8m higher payments than expected over the past six months. The key components of the actuarial strengthening are:

- An actuarial strengthening of $19.0m relating to medical costs, primarily relating to medical aids and appliances where we have extended the 'tail' to account for a longer future period for which claimants will access hearing aids.
- An actuarial strengthening of $6.8m relating to allied health, primarily relating to the fitting fees associated with hearing aids; this increase mirrors the increase in aids.
- An actuarial strengthening of $5.6m relating to lump sums following the higher claim reports and indications of an increasing proportion of claimants receiving a lump sum.
- The movements in the remaining benefit groups are small and add up to an actuarial release of $0.9m.
- Movements due to economic assumptions result in a $0.6m increase in the liability.

Table 7.2 below shows the actuarial strengthening for NIHL claims by accident period.

Table 7.2 – NIHL Short Term Claims: actuarial release (strengthening) by accident period

Accident Period	Lump Sums	Medical + Allied health	Worker Legals	Other Benefits[1]	Total
	$m	$m	$m	$m	$m
Pre Jun-15	-0.9	-13.5	-0.1	-0.4	-14.8
Jun-16	0.1	-0.9	0.0	0.0	-0.8
Jun-17	0.2	-0.8	0.1	0.0	-0.7
Jun-18	-0.1	-1.2	0.1	0.0	-1.2
Jun-19	-1.5	-2.2	-0.3	-0.1	-4.0
Jun-20	-0.9	-1.5	-0.2	0.0	-2.6
Jun-21	-0.6	-1.5	0.0	-0.1	-2.2
Jun-22	-0.6	-1.4	0.1	-0.1	-2.0
Jun-23	-1.5	-2.7	0.1	-0.1	-4.2
Total	-5.6	-25.8	-0.1	-0.8	-32.4

Nearly 50% of the actuarial strengthening ($14.8m) is related to the pre-2015 accident years, where we now expect a longer duration of hearing aid purchasing. A further 13% relates to the 2023 accident year where claim reports were higher than expected.

The remainder of this section deals with the payment experience and valuation basis.

7.3 Lump sums

Payment experience

Table 7.3 summarises the payments in the six months to 30 June 2023 with the expected payments from our December 2022 valuation projection. Payments were 43% higher than expected in the last six months.

Table 7.3 – Actual vs expected payments: Hearing Loss claims lump sums

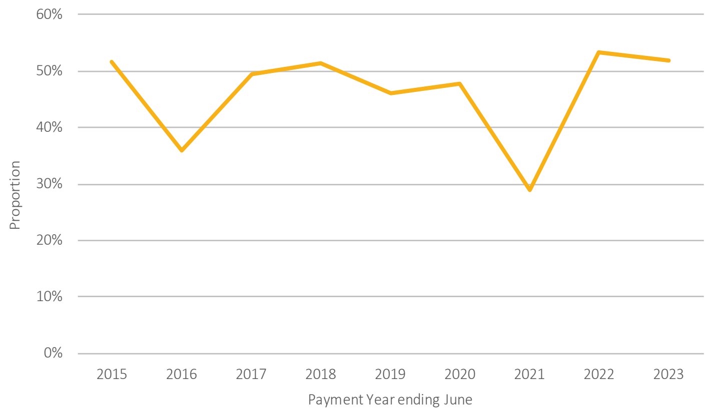
Accident Period	Payments in Six Months to Jun 23			
	Actual	Expected	Act - Exp	% Difference
	$m	$m	$m	
To 30 Jun 05	0.4	0.4	0.1	18%
2005/06 - 2014/15	1.3	1.1	0.2	20%
2015/16 - 2019/20	1.3	1.3	0.0	3%
2020/21 - 2021/22	4.2	2.9	1.3	46%
2022/23	2.3	1.1	1.2	118%
Total	9.5	6.6	2.9	43%

Valuation basis

When estimating the number of future Hearing Loss lump sums, we explicitly track the proportion of claims that are reaching the 5% WPI threshold, given the major changes to new claim levels in recent years.

Figure 7.1 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. To allow for payment delays, the payments in a period are expressed relative to reports from the previous six months.

Figure 7.1 – Proportion of Hearing Loss claims getting a lump sum



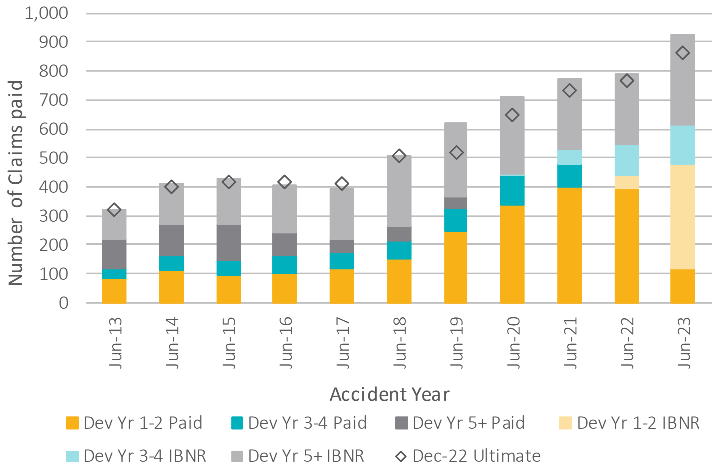
The key features we note are:

- The proportion of Hearing Loss claims receiving a lump sum was around 50% up to 2018.
- 2019 and 2020 dropped below 50%, with 2020 partially impacted by COVID-19.
- 2021 was heavily impacted by COVID-19 restrictions on the ability to get assessments. Operational changes by ReturnToWorkSA to strengthen claim acceptance processes will also have increased the time between lodgement and lump sum. This resulted in the proportion falling to 30%.
- Experience in 2022 and 2023 shows a rebound of lump sum payments, with over 50% of reports from the proceeding six month period receiving a lump sum payment.

Our selected basis implies that the patterns will remain at recent levels, with ultimate lump sums at around 53% of ultimate Hearing Loss claims for recent injury years. This is unchanged from the December 2022 valuation basis.

Figure 7.2 shows the projected numbers of Hearing Loss lump sums by accident year. The tail of Hearing Loss IBNR claims is long, with claims still emerging many years after the end of exposure. The expected number of lump sum payments for the 2019 to 2023 accident year have increased in line with higher claim reports.

Figure 7.2 – Projected ultimate numbers of Hearing Loss lump sums



The average benefit paid for a Hearing Loss lump sum claims is 3.7% of the maximum benefit for claimants that report within 6 years post injury and 3.65% for claimants that report more than 6 years post injury, up from 3.55% at the previous valuation and in line with the emerging experience.

7.4 Legal costs

This section presents results relating to worker legal costs only. While some corporation legal costs will relate to the management of Hearing Loss claims, these expenses are not allocated between claim types and so are not separated for our work.

Payment Experience

Table 7.4 summarises the payments in the six months to 30 June 2023 with the expected payments from our December 2022 valuation projection; Payments were 19% higher than expected.

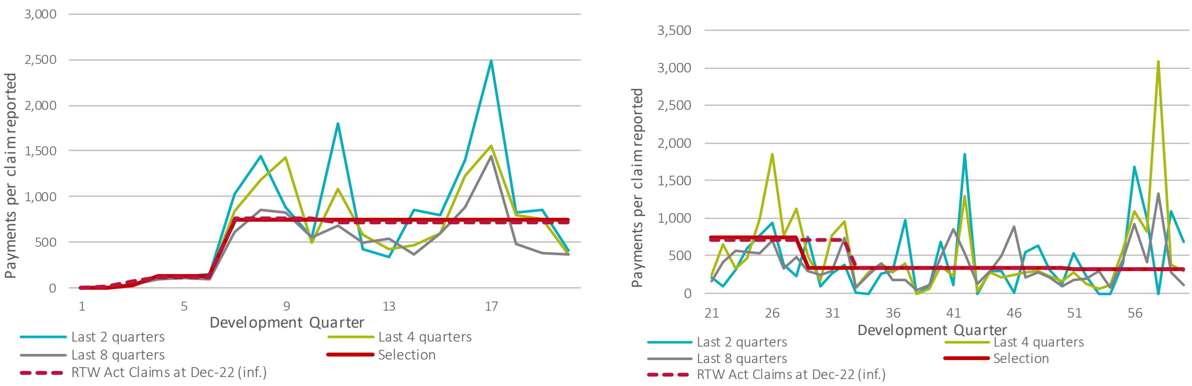
Table 7.4 – Actual vs expected payments: Hearing Loss claims legal payments

Accident	Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m	
To 30 Jun 06	0.1	0.1	0.0	73%
2006/07 - 2014/15	0.1	0.1	(0.0)	-3%
2015/16 - 2019/20	0.3	0.3	0.0	12%
2020/21 - 2021/22	0.4	0.3	0.1	33%
2022/23	0.0	0.1	(0.0)	-29%
Total	1.0	0.9	0.2	19%

Valuation basis

A PPCR model is used to value Worker Legal fees. Figure 7.3 below shows the recent experience and selected basis for Worker Legal payments.

Figure 7.3 – Worker Legal experience and selections: Hearing Loss claims



Payments for worker legal services have remained high over the last six months. We have reshaped the pattern of expected legal expenses up to eight years post injury, resulting in an overall minor decrease. We expect much of the recent high payments relate to the resolution of a large pool of outstanding disputes and as such the future cost will reduce somewhat from its currently high level as the ongoing dispute resolution process reverts to a 'business as usual level'.

7.5 Medical and other entitlements

For the valuation we split the remaining entitlements into the following groups: Medical Reports (medico-legal assessment costs), Medical Aids and Appliances and Other costs combined (this includes Allied Health, Medical Services, Investigation, Travel, Other and minor payments for Hospital, Care, Rehabilitation).

Payments vs expectations

Table 7.5 summarises the payments in the six months to 30 June 2023 with the expected payments from our December 2022 valuation projection.

Table 7.5 – Actual vs expected payments: Hearing Loss claims Medical costs

Accident	Medical Report Payments in Six Months to Jun 23				Medical Aid and Appliances Payments in Six Months to Jun 23				Other Payments in Six Months to Jun 23			
Period	Actual	Expected	Act - Exp	% Act - Exp	Actual	Expected	Act - Exp	% Act - Exp	Actual	Expected	Act - Exp	% Act - Exp
	$m	$m	$m		$m	$m	$m		$m	$m	$m	
To 30 Jun 06	0.1	0.1	(0.0)	-28%	1.0	0.9	0.1	9%	0.4	0.3	0.0	10%
2006/07 - 2014/15	0.3	0.3	(0.0)	-6%	1.1	1.3	(0.1)	-12%	0.5	0.5	(0.0)	-4%
2015/16 - 2019/20	0.3	0.3	0.0	2%	0.8	0.5	0.3	54%	0.3	0.2	0.1	46%
2020/21 - 2021/22	0.5	0.6	(0.1)	-10%	0.8	0.7	0.1	7%	0.4	0.3	0.0	9%
2022/23	0.8	0.8	(0.0)	-3%	1.1	0.7	0.4	50%	0.5	0.4	0.1	33%
Total	1.9	2.1	(0.1)	-7%	4.7	4.1	0.6	15%	2.0	1.8	0.3	16%

Overall payments were higher than expectation, with:

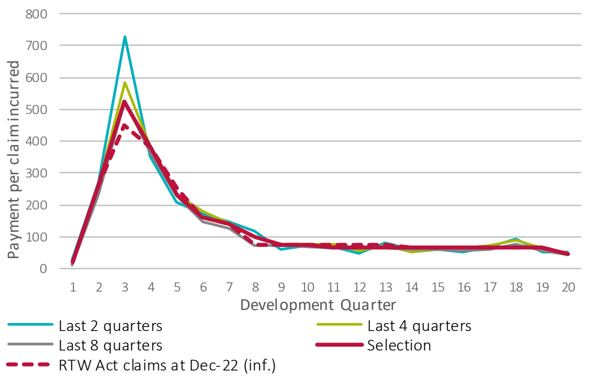
- Medical Report payments lower than expected, with the difference arising across most injury periods.
- Aids and Appliances payments being 15% higher than expected, this is largely driven by higher claim reports in newer accident periods.
- Other payments were 16% higher than expected, the experience is broadly in line with the trends seen in aids and Appliances.

Valuation basis

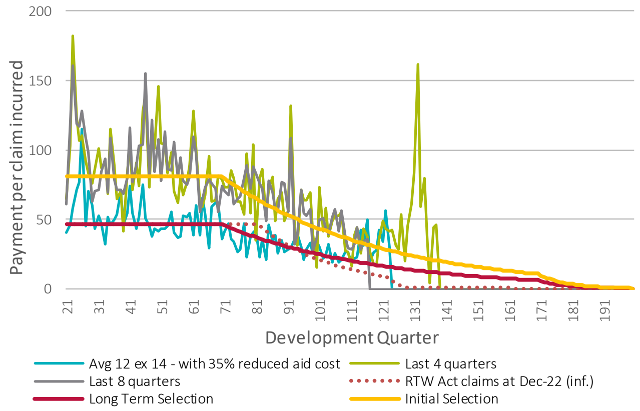
Figure 7.4 below shows the recent experience and selected basis for medical payments across the various components that are separately modelled.

Figure 7.4 – Medical experience and selections

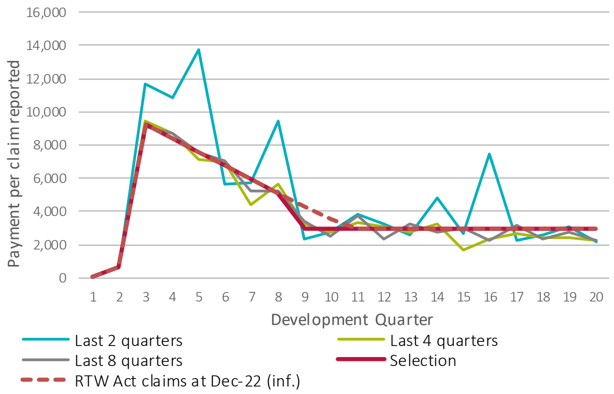
PPCI – Medical Aids and Appliances



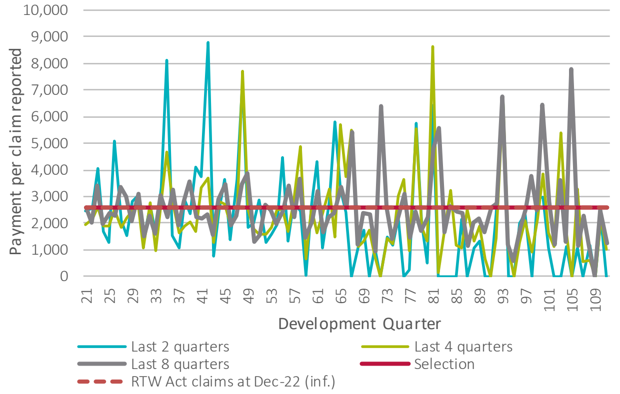
Tail PPCI – Medical Aids and Appliances



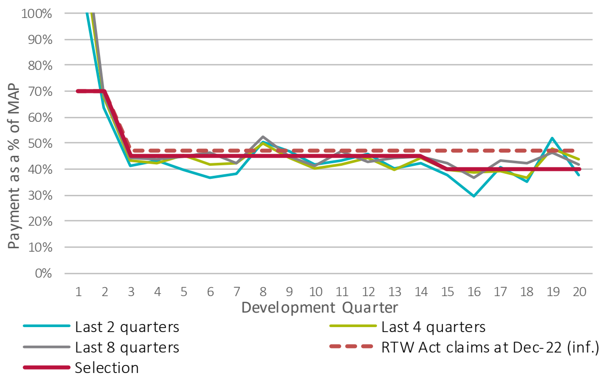
PPCR – Medical Reports



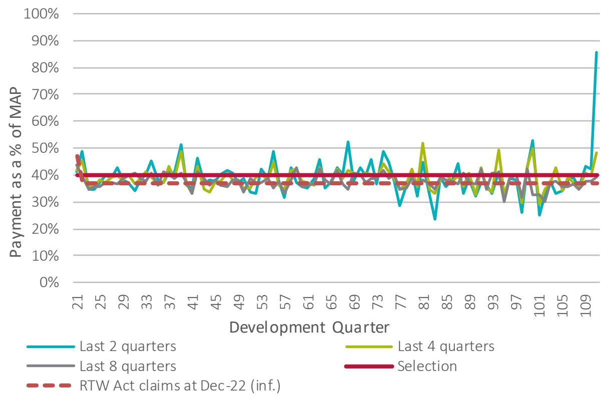
Tail PPCR – Medical Reports



Payment as a % of MAP – Treatment Rest



Tail Payment as a % of MAP – Treatment Rest



Our comments on the experience and selected assumptions are:

- PPCI (Medical aids and appliances)
  - > Assumptions are increased from our previous basis, in line with the average last eight.
  - > Our selected PPCI tail has been lengthened from the previous valuation
    - – We have allowed for elevated payments associated with higher new claim reports to continue for the next three years, staying at the current level over the next year and then progressively tapering off, to incorporate an allowance for higher reports and subsequent purchasing of aids over the next 3 years. The expectation then reverts to

longer term average trend, after incorporating the changes to fee schedules that have lowered the average cost per device.

    - We are allowing for payments to continue for longer durations post injury than previously, with the PPCI increased beyond 125 quarters from injury. This selection reflects the life expectancy of claimants recently accessing aids from the scheme's oldest accident periods.

  - Average size relativity (not shown above) - the pattern of rejections, disputation and subsequent acceptance of hearing loss claims means that the ultimate proportion of claims that are accepted is expected to be broadly unchanged for all accident periods to 30 June 2019. For accident periods between 1 July 2019 and 30 June 2021, we are expecting 1% less future claims cost as a result of reducing acceptance rates. For periods after 30 June 2021, we are expecting a 6% reduction in accepted claims that will reduce the average claim size (relative to all reported claims) similarly for this year. This is unchanged since our previous review.

- PPCR (Medical, reports):
  - Our selected PPCR has decreased a little in line with lower costs seen in the 'last 4'.
- PPCI (Allied health and remaining entitlements)
  - There is a relatively stable relationship between the payment for aids and the costs for allied health services. As such the PPCI and associated selection is expressed in that format. Our selected PPCI is broadly in line with the average experience over the last 4 quarters. It has been increased at durations up to 5 years post injury and increased thereafter.
  - The remaining entitlements are spread over the other benefits by selecting a proportion related to the average payments over the last 3 years. The figure shows 85% of payments relate to Allied Health, with the remaining costs allocated to Medical (primarily professional fees), Investigation and Other.

8 Serious Injury claims

The following sections summarise the Serious Injury claim results.

8.1 Background

"Serious Injury" claims are those who meet the applicable WPI threshold of 30% or 35% (threshold determined by date of assessment) and as a result are eligible to receive Income Support to retirement and other benefits for life under the RTW Act (unless otherwise closed out via a s56A future economic loss payment or redemption).

The number and characteristics of the Serious Injury cohort have a significant level of uncertainty as:

- Serious Injury claims were not identified before the RTW Act commenced
- The introduction of 'combining injuries' has led to a stepwise increase in the number of Serious Injury claims, and it is not yet clear where this will settle
- The 2022 reforms increased the Serious Injury WPI threshold and changed the type of benefits available to these claims (by providing the option to take a lump sum payment rather than the lifetime benefit package).

Section 5 describes our projection of Serious Injury claim numbers.

Our valuation work separately considers claims managed internally by ReturnToWorkSA in the EnABLE group, which are generally more like Severe Traumatic Injuries (who require significant levels of care and support, or have other special needs), and "Other Serious Injuries" that are not internally managed by ReturnToWorkSA.

8.2 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.

Our assumptions have been set as described in Appendix A and summarised in the following table.

Table 8.1 – Approach to setting valuation assumptions for Serious Injury claims[1]

	Severe Traumatic Injuries	Other Serious Injury
Life expectancy	Mortality improvement of 0.5% p.a. (unchanged from previous valuation). Mortality loadings for claims with high care needs (reducing life expectancy by 17 years) and for moderate care needs (reducing life expectancy by 7 years).	Mortality improvement of 0.5% p.a. (unchanged from previous valuation).
Income Support	To retirement age on all IS ongoing claims, given the high level of needs for these claims we do not allow for any future s56A elections or Income Support redemptions unless advised by ReturnToWorkSA. Based on historical experience and estimates provided by ReturnToWorkSA.	To retirement age on all IS ongoing claims, with an allowance for s56A elections which finalises entitlement to income benefits (see Appendix A.13 for more details). Based on historical experience.

	Severe Traumatic Injuries	Other Serious Injury
Treatment Related Costs and Other[2]	Paid for life, and consistent with Income Support projections, we do not make any allowance for redemptions unless advised by ReturnToWorkSA. 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, with an allowance for medical redemptions which finalises entitlement to medical benefits (see Appendix A.13 for more details). Early duration claims (treatment and recovery phase) are based on payment per active claim curves selected from this cohort. Mid-to-long duration claims (maintenance phase) are based on historical experience.
Lump sums	Non-economic payments are 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, noting that the WPI threshold has increased post reform. Future economic loss payments are based on claimant profile, prescribed formula and assumed take-up rate for those who elect for a s56A election (s56A elections are only available for Return To Work Act accidents). This includes an allowance for medical redemptions, with a link to the s56A take-up rate and consideration of current medical/ treatment spend.	
Legal and Investigation	Legal costs are modelled as a percentage of IS costs, net of payments to date. An average ultimate investigation cost per claim is adopted, net of payments to date.	Modelled as payment per claim incurred.
Recoveries	Projected for 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. Care inflation: 5.0% p.a. overall inflation for the next three years. Beyond three years we assume super imposed inflation of 1.0% p.a., gradually increasing to the long-term rate of 1.5% 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. Care inflation: as for Severe Traumatic Injuries.
IBNR Assumptions	IBNR claims for the latest five accident years only. Claim size based on historical experience of current claims.	IBNR claims for all accident years, reflecting the historical experience regarding the delay from injury to determination, and the estimated ultimate frequency as a proportion of wages. Claim size based on historical experience of current known and potential claims.

	Severe Traumatic Injuries	Other Serious Injury
Reform Transition Provisions	Transition provisions outline when the new thresholds and rules will be applicable to new cohorts of claimants. We have considered this as part of our allowances.	

[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, Allied Health, 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.

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. There are decrements for Treatment and Other payments of mortality and redemptions, while Income Support payments have an additional decrement for retirement and s56A election.
  - Legal and Investigation – Payments per Claim Incurred.
  - Recoveries – Proportion of Gross Payments
  - s56A elections and redemptions are modelled as the likelihood of take-up multiplied by the relevant average lump sum or redemption size.
- These aggregate 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.
- Individual claim models, based on a claimant's actual historical experience, are used beyond the period where the aggregate models apply.

One of the key determinants of very long term costs will be how much, if any, of the costs associated with ageing are compensated by the scheme. Based on the experience to date, albeit for 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 that aged care related costs are funded by the Federal government. If this changes then the cost implications would likely be significant.

8.3 Overall results

Table 8.2 shows the central estimate of Serious Injury claims costs at 30 June 2023 and movement in our liability estimates since the December 2022 valuation.

Table 8.2 – Serious injury claims valuation results (excluding CHE)

	Income Support	Hospital	Medical	Travel	Rehab-ilitation	Allied Health	Investi-gation	Other	Care	Legal - Non-Contract	Lump sums	Redemp-tions	Legal Contract	Recov-eries	Total
	$m	$m	$m	$m	$m	$m	$m	$m		$m	$m	$m	$m	$m	$m
Dec-22 Valuation															
Estimated Liab at Dec-22	669	117	395	49	13	207	1	45	375	20	211	14	20	-31	2,105
Projected Liab at Jun-23	693	124	416	53	14	218	1	47	385	21	217	10	21	-30	2,189
Jun23 Valuation															
Movement in liability due to claims performance	15	-9	-31	-7	-1	2	0	4	26	3	-20	-3	-7	2	-27
Estimated Liab at Jun23 (Dec22 ecos)	**708**	**114**	**384**	**45**	**13**	**221**	**1**	**51**	**411**	**24**	**196**	**8**	**14**	**-28**	**2,161**
Impact of change in ecos	5	1	5	1	0	3	0	1		0	-2	0	0	0	17
Estimated Liab at Jun23 (Jun23 ecos)	**713**	**116**	**389**	**46**	**13**	**223**	**1**	**51**	**415**	**24**	**195**	**8**	**14**	**-28**	**2,179**
AvE Payments - six months to Jun-23	-2	0	0	0	0	0	0	1	0	0	1	-1	-1	1	0
Actuarial Release at Jun-23	-13	9	31	7	1	-3	0	-4	-26	-3	20	3	7	-3	27

The outstanding claims cost for Serious Injury claims (excluding CHE) is $2,179m at 30 June 2023. The main movements from our December 2022 projection of the June 2023 liability are:

- Claims experience and basis changes decreased the liability by $27m, as a result of:
  - A $64m net reduction as a result of claim number changes, comprising:
    - A $48m increase due to higher *primary* Serious Injury claim numbers. A small number of Severe Traumatic Injury claims with very high care needs contributed to this result.
    - A $111m decrease for claims who are *combining injuries* to reach Serious Injury, where fewer than expected claims are reaching the Serious Injury threshold due to combining injuries (see Section 5.2.3), but those who are emerging are tending to have a higher than expected claim size.
  - A $22m increase due to s56A and redemption assumptions. This recognises the latest information on claims, including claimants' response to redemption offers and changes in claimant circumstances that indicate a lower likelihood of taking a s56A payment, as well a small revision to the profile of claims that are anticipated to take a medical redemption.
  - A $15m increase due to other changes. The main driver was an increase in expected income support spend for Other Serious injury claims.
- Updating economic assumptions at the current valuation resulted in an increase of $17m.

Table 8.3 shows the actuarial release by accident period for Serious Injury claims.

Table 8.3 – Actuarial release: Serious Injuries

Accident Period	Projected Liab at Jun-23 from Dec-22 Valuation	Jun-23 Estimate on Dec-22 Eco Assumptions	Difference from Projected Liability	Act v Exp Pmts in 6 months to Jun-23	Actuarial Release[1]	Release as %
	$m	$m	$m	$m	$m	
To 30 Jun 15	743.0	760.4	17.4	-7.4	-10.1	-1%
2015/16 - 2019/20	818.2	819.7	1.5	4.4	-5.9	-1%
2020/21 - 2021/22	403.5	368.1	-35.5	2.1	33.3	8%
2022/23	223.9	213.2	-10.6	0.7	9.9	4%
Total	2,188.6	2,161.4	-27.2	-0.1	27.3	1%

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

The majority of the actuarial release is from the RTW Act period, driven by the reduction in assumed claim numbers that result from combining injuries to reach the Serious Injury threshold.

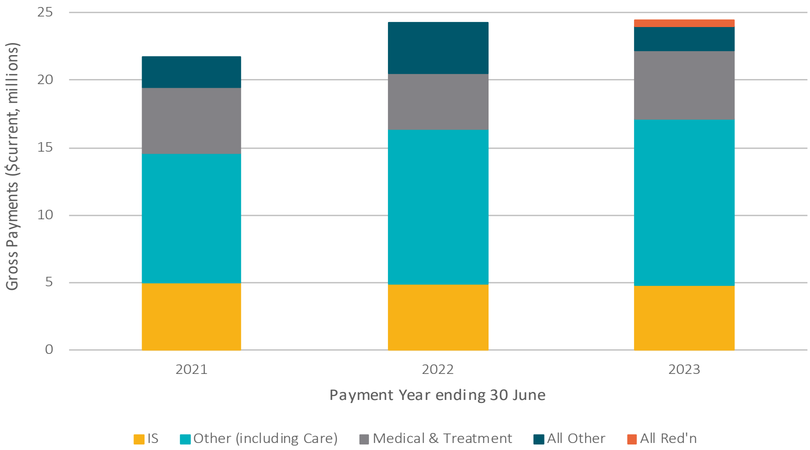
The remainder of this section deals with the payment experience and valuation basis.

8.4 Severe Traumatic Injury claims

8.4.1 Payments by type

Figure 8.1 shows claim payments over the past three years for Severe Traumatic Injury claims.

Figure 8.1 – Severe Traumatic Injury claim payments ($Jun23)



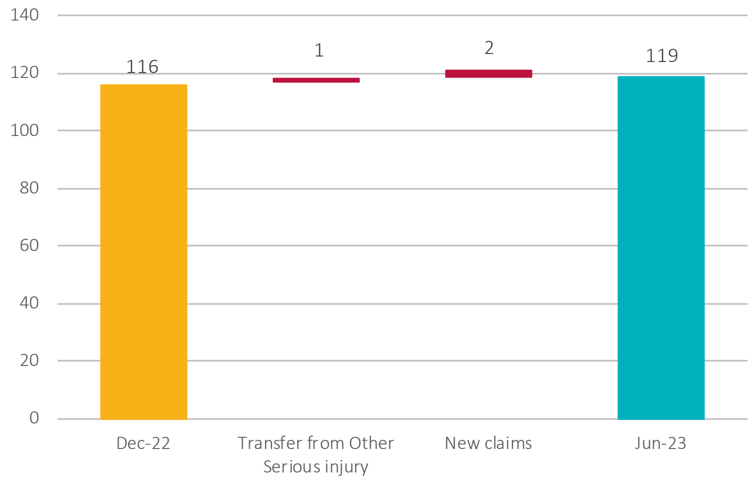
$71m has been paid to Severe Traumatic Injury claims in the last three years. After allowing for recoveries of $3m over this same period, this equates to an average of around $22m p.a. in net claim payments (in 30 June 2023 values), comprising around:

- $11m p.a. in care and other costs.
- $5m p.a. in medical, treatment and related benefits.
- $5m p.a. in income support.
- $2m p.a. in lump sums.
- Small amounts of legal, investigation and redemption payments ($0.4m p.a.).
- $1m p.a. in recoveries.

8.4.2 Claimant profile

Figure 8.2 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.

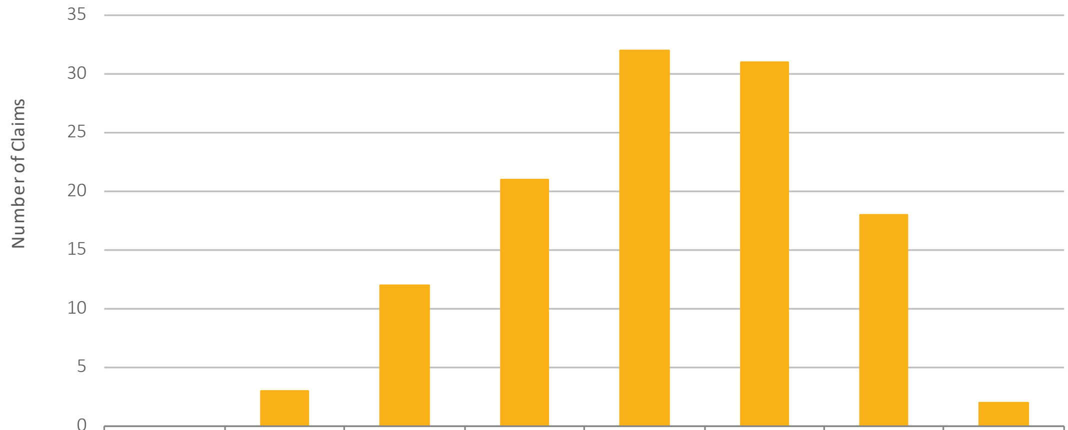
Figure 8.2 – Movement in Severe Traumatic Injury claim numbers



There are 119 active Severe Traumatic Injury claims with expected ongoing benefits at June 2023, compared to 116 at the previous valuation. The increase is a result of one claim transitioning from the Other Serious Injuries cohort to the Severe Traumatic Injuries cohort, as well as two new claims from the latest accident year. We were also verbally advised of two new Severe Traumatic Injury claims that were notified in July, and we have taken this into account when setting our IBNR allowances.

Figure 8.3 shows the age and life expectancy of the current Severe Traumatic Injuries.

Figure 8.3 – Age distribution and life expectancy (in years) of Severe Traumatic Injuries



	<20	20s	30s	40s	50s	60s	70s	Older
Number of Claims	0	3	12	21	32	31	18	2
Loaded Life Expectancy	0	55	41	37	20	18	12	6

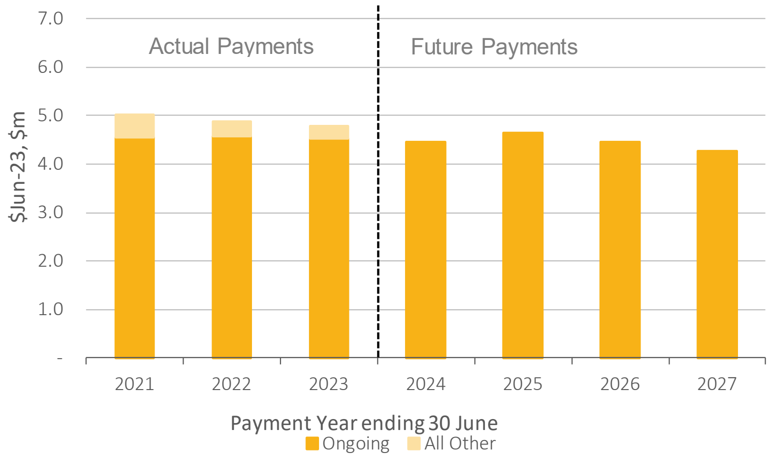
Severe Traumatic Injury claimants are currently aged around 58 on average, with an expected future life expectancy of about 26 years (after allowing for mortality, mortality improvements and mortality loadings). The average age at injury was about 40 years.

Around 60% of the current Severe Traumatic Injuries have a WPI assessment, with an average WPI of around 57%; the relatively low completion rate is partly explained by older claims being paid their lump sum prior to the introduction of WPI assessments in 2009. At this valuation, there are 11 claims with recorded WPI assessments below 35%; ignoring these claims, the average assessed WPI is approximately 62%.

8.4.3 Income Support

Figure 8.4 shows historical and projected Income Support payments for Severe Traumatic Injury claims (including IBNR claims for existing accident years).

Figure 8.4 – IS Payments: Severe Traumatic Injury Claims ($Jun23)

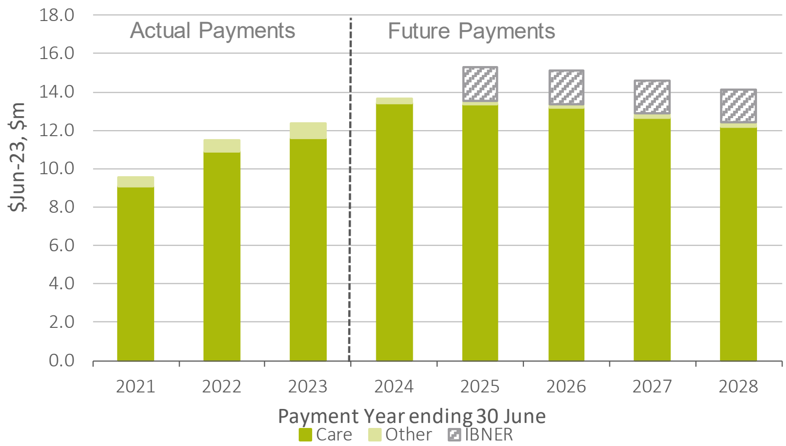


We estimate around $4.5m will be paid in Income Support to Severe Traumatic Injury claims in 2024 – similar to 2023 actual payments, once the amount paid to claims who have ceased Income Support benefits is removed. Projected future payments reduce over time in line with changes in replacement ratios, expected mortality and retirement. The projected payments for known claims are equivalent to 13 years' worth of the expected 2024 payments.

8.4.4 Care and other costs

Figure 8.5 shows historical and projected care and other payments for Severe Traumatic Injury claims (including IBNR claims). As indicated by the strong growth in recent years, there has been pressure on care costs (which is primarily attributable to the NDIS), and this has been considered in our inflationary allowances that were summarised in Table 8.1.

Figure 8.5 – Care (incl. Other) payments: Severe Traumatic Injury claims ($Jun23)

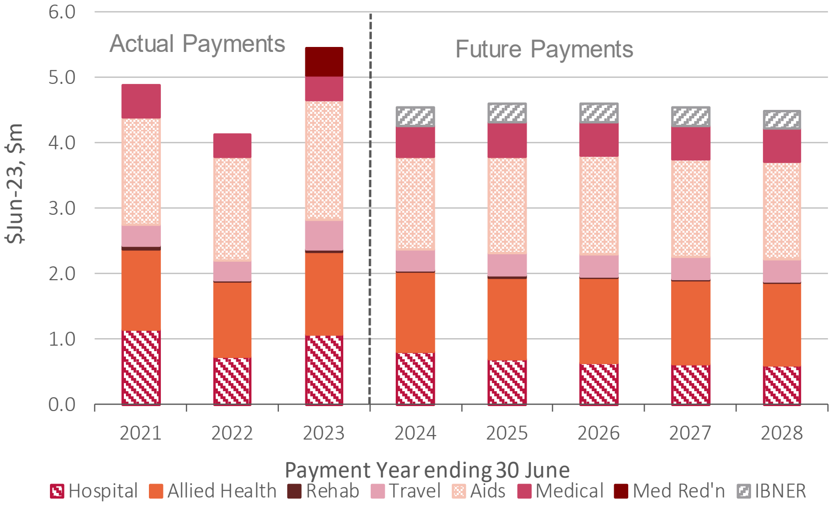


We expect $13.6m of care and other payments in 2024, which is higher than actual payments of $12.4m in 2023; this is the result of the high levels of care costs projected for new EnABLE claims. Projected payments then increase in FY25, due to our IBNER allowance which is intended to capture an annualised contribution for other benefits (primarily modifications and transfers from initial hospital care into home care, or from unpaid family care to paid care). These increases are slowly offset by reductions due to mortality, with the outstanding claims projection equivalent to 21 years of the expected 2024 payments, including the IBNER allowances.

8.4.5 Treatment and related costs

Figure 8.6 shows historical and projected treatment and related costs for Severe Traumatic Injury claims (including IBNR claims).

Figure 8.6 – Treatment and related payments: Severe Traumatic Injury claims ($Jun23)



We expect future treatment and related payments of $4.5m in 2024, around the average of the last three years. The outstanding claims projection is equivalent to 28 years of the expected 2023 payments, including the IBNER allowances.

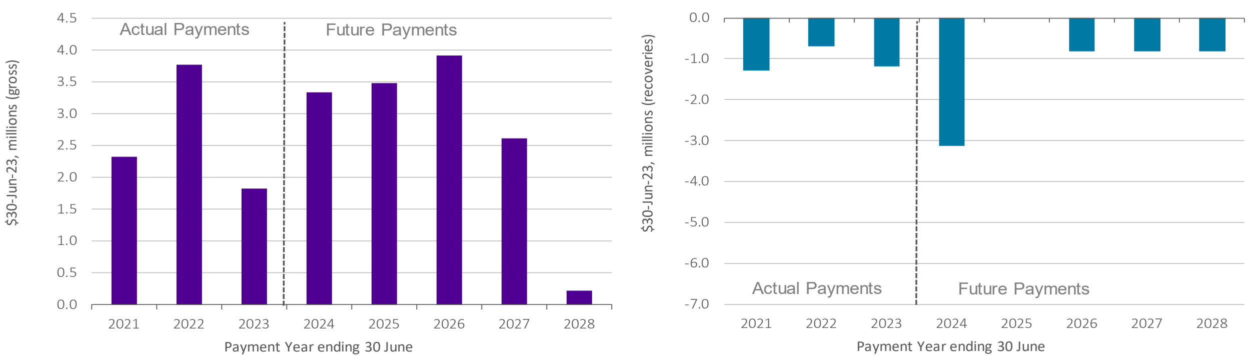
8.4.6 All other payments

The following graph shows historical 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 8.7 – All other payments: Severe Traumatic Injury claims ($Jun23)

Gross Costs

Recoveries



In the three years to 30 June 2023, a net $4.7m of other benefits was paid for Severe Traumatic Injury claims. Our future projections for claims occurring prior to 30 June 2023 include (in current dollars):

- Lump sum benefits of $11.5m paid to claims who have not yet had a lump sum. This includes s56A lump sums and medical redemptions for two claimants who have elected to receive these.
- Legal and investigation costs of $2.1m.

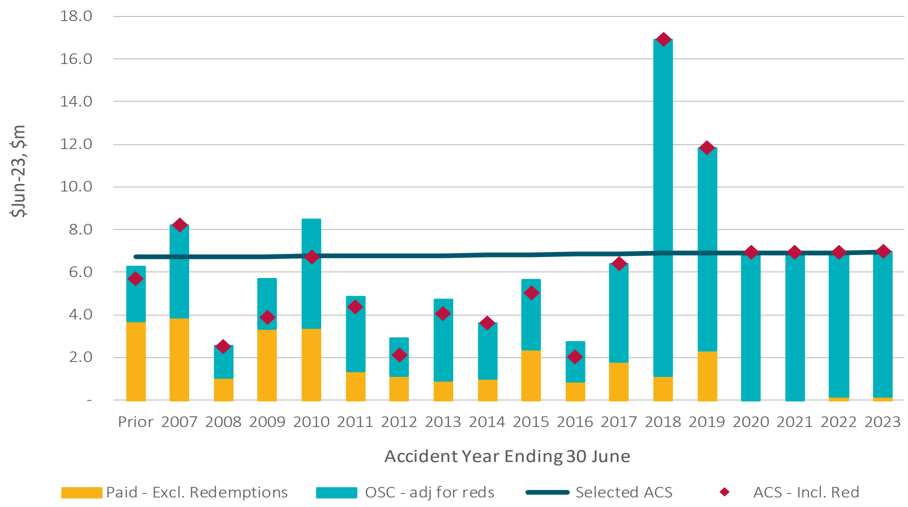
- Recoveries of $5.6m, $3.1m of which is for those claims where ReturnToWorkSA has identified recovery potential, with the remaining amount attributable to IBNR claims. The recovery allowance is based on input from the relevant ReturnToWorkSA staff.

Due to the one-off nature of most of these payments, the outstanding liability is a much lower multiple of expected 2024 expenditure.

8.4.7 Overall results and implications

Figure 8.8 shows the net ultimate average claim size across current Severe Traumatic Injury claims. A large proportion of the estimated cost is projected future payments, so there is greater uncertainty about ultimate costs than in other areas of the valuation.

Figure 8.8 – Average claim size: reported Severe Traumatic Injury claims ($Jun23)



The average claim size across current Severe Traumatic Injury claims is around $5.4m in current 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 $6.1m. As shown, we project that the average size for the 2018 and 2019 accident years will ultimately be higher than this, reflecting two (very) high needs claims.

For recent years, where injuries are yet to stabilise, we project an average size of $7.0m, which is higher than the average over all Severe Traumatic Injury claims. This is because recent accident years have had lower claim numbers than the longer-term history, and this seems to be leading to a more complex profile for claims being managed by EnABLE. The table below demonstrates this impact, by comparing the average size of claims depending on whether there were more or fewer than five claims in the year.

Table 8.4 – Average size by no. of claims in accident year

Claims in Accident Year	Claims	ACS
		$m
5 or Fewer	69	7.0
More than 5	69	5.3
Total	138	6.1

*Excludes redeemed claims

Our selected average size of $7.0m was set with reference to the average size of claims from accident years with five or fewer claims, noting that we currently assume four claims for a new accident year.

8.5 Other Serious Injury claims

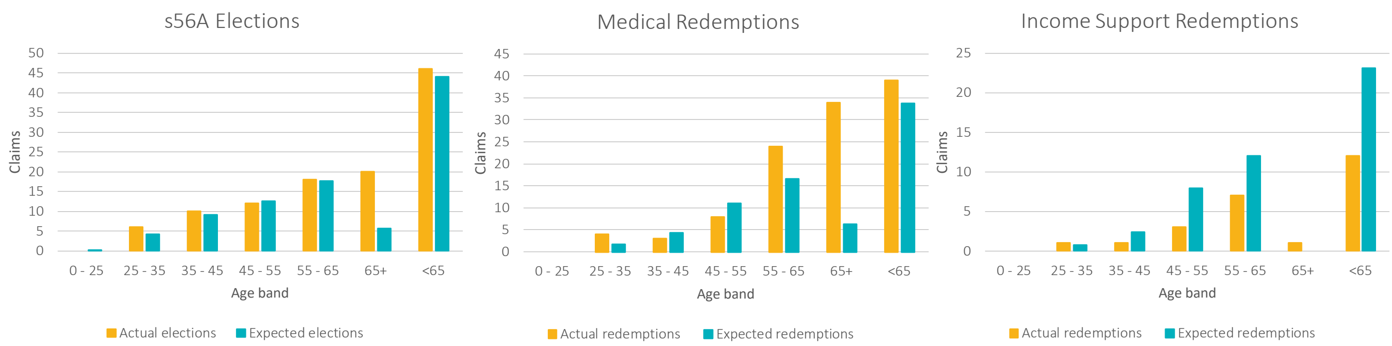
8.5.1 Experience since the 2022 reforms

The *Return to Work (Scheme Sustainability) Amendment Act 2022* had the following impacts on the Serious Injury valuation:

- 'Combining injuries' was codified. In practice, the combining of injuries for WPI assessments has been operational since November 2021; the experience to date is summarised in Section 5.2.3
- The Serious Injury WPI threshold for physical injuries was increased from 30% to 35%, for claims who have not had a final examination for at least one body part by 31 December 2022. Our allowance for this is summarised in Section 5.2.4.
- Claims have the ability to commute their Income Support and Medical payments via a s56A election (commutes Income Support and Return to Work and Rehab services) and redemptions (available for both Income Support and Medical). We discuss experience to date and the valuation responses in respect of the change below.

Figure 8.9 shows actual s56A elections, Medical redemptions, and Income redemptions to date compared with previous valuation expectations, for those claims who have clearly decided whether to accept a s56A election or redemption, or those where ReturnToWorkSA does not believe they will take an election or redemption in the future.

Figure 8.9 – Actual vs expected s56A elections, Medical redemptions, and Income Support redemptions



Our high level observations to date are:

- For claimants above age 65, more claims have made a s56A election or accepted a redemption than expected. The valuation savings from this group are modest given:
  - > Most claims have a nil or very close to nil Income Support liability. Indeed, the main reason that s56A elections have been so high among this age group is because claims above retirement age but below 70 are not eligible for Income Support payments, but are eligible for a small s56A payment; that is, a s56A election in this age bracket is essentially 'free' money
  - > The future life expectancy for these claimants is lower, so the projected medical cost is lower than for younger claimants
- For claims below age 65
  - > s56A elections and medical redemptions have been close to expectations
  - > Income Support redemptions have been lower than expected. This relates purely to WRC Act periods; our assessment is that it is not surprising that claimants who have been on

benefits for significant periods of time have been less receptive to commuting ongoing benefits for a lump sum payment.

Our response to experience to date for s56A and redemption claims is as follows:

- For claims that have made a clear decision, the outcome of that decision has been reflected
- For undecided and IBNR claims, assumptions have been left largely unchanged. For claimants below age 65 – where the majority of valuation savings come from – actual outcomes have been fairly consistent with expectations. The only exception is that for medical redemptions we now assume that the profile of claims who accept a redemption is slightly more biased towards claimants with lower treatment needs.

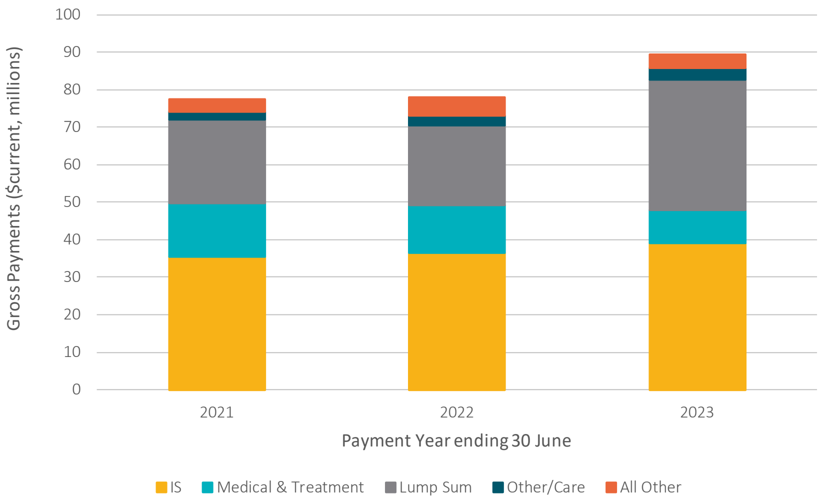
This approach is unchanged from the previous valuation. Detailed assumptions are provided in Appendix A.12.3.

All experience discussed hereafter includes our allowance for s56A elections and both income and medical redemptions.

8.5.2 Payments by type

Figure 8.10 shows claim payments over the past three years for the Other Serious Injury claims (i.e. excluding Severe Traumatic Injuries).

Figure 8.10 – Other Serious Injury claim payments ($Jun23)



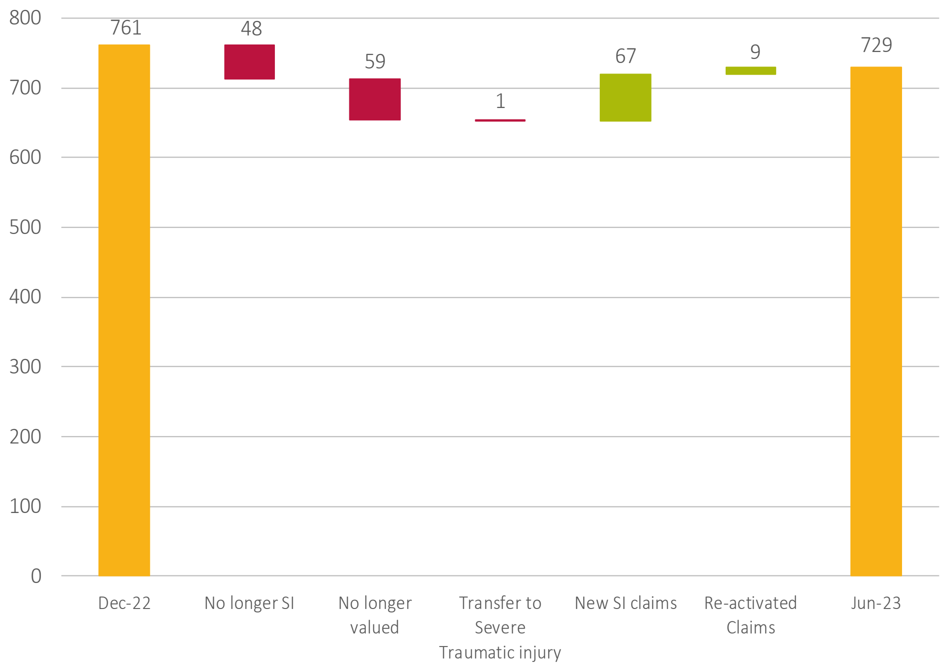
Around $254m has been paid to Other Serious Injury claims in the last three years, with growing costs as claim numbers have increased. After allowing for recoveries of $12m over this same period, this equates to an average of around $81m p.a. in net claim payments (in 30 June 2023 values), comprising:

- $37m p.a. in Income Support.
- $12m p.a. in medical, treatment and related benefits.
- $26m p.a. in lump sums; we note that around half the increase from 2022 to 2023 is due to s56A payments
- Small amounts of other benefits ($7m) and redemptions ($2m).
- $4m p.a. in recoveries.

8.5.3 Claimant profile

Figure 8.11 shows the number of active Other Serious Injury claims (those being valued) at the current and previous valuation.

Figure 8.11 – Movement in Other Serious Injury claim numbers



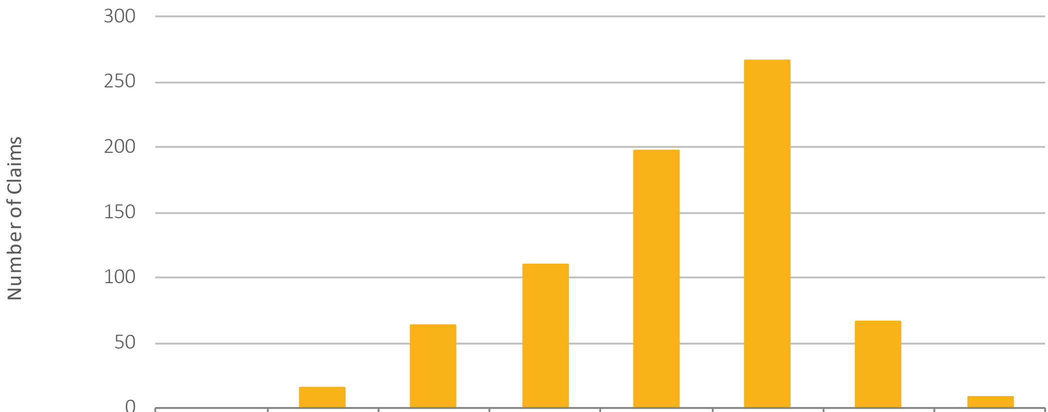
There are 729 active Other Serious Injury claims at June 2023 (with expected ongoing benefits), compared to 761 at the previous valuation. The components of the movement in numbers are:

- No longer Other Serious Injury (reduction of 48): the majority of this decrease is driven by the change in valuation approach to no longer rely on manual reviews, with these claims now becoming part of the IBNR allowance. For more information, please refer to Section 5.
- No longer valued (reduction of 59): this reduction was primarily driven by redemptions, which end ongoing entitlements for the claimant.
- Moved to Severe Traumatic injury (reduction of 1 claim): this claim was moved to the Severe Traumatic Injury cohort since the previous valuation.
- New Other Serious injury – increase of 67 due to newly determined claims.
- Reactivated claims – increase of 9 claims, mainly relating to claims who were inactive for more than 12 months but have been re-activated in the past six months.

We note that the numbers in Figure 8.11 refer to claims that are Medical ongoing, which is the broadest group of ongoing claims.

Figure 8.12 shows the current age and life expectancy of the known and potential Other Serious Injury claims.

Figure 8.12 – Age distribution and life expectancy (in years) for Other Serious Injury claims



	<20	20s	30s	40s	50s	60s	70s	Older
Number of Claims	0	16	63	110	198	266	67	9
Life Expectancy	0	55	50	41	31	23	15	9

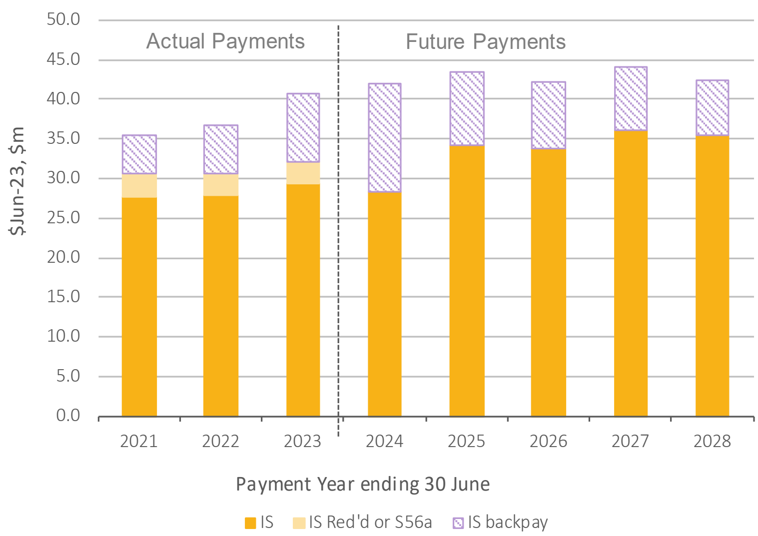
The Other Serious Injury claims are currently aged around 57 on average, with an expected future life expectancy of 30 years (after allowing for mortality, including mortality improvements). The average age at injury was 47 years.

Around 78% of the current Other Serious Injuries have had a WPI assessment, averaging around 37% WPI. At this valuation, there were 78 claims with recorded WPIs below 30%; the average impairment level excluding these lower assessments is around 39%. When looking at the changing WPI threshold to 35%, only 40% of claims have so far had a WPI over 35%, with an average impairment level of 45%.

8.5.4 Income support

Figure 8.13 shows historical and projected Income Support payments for Other Serious Injury claims (including IBNR claims).

Figure 8.13 – IS payments: Other Serious Injury claims ($Jun23)

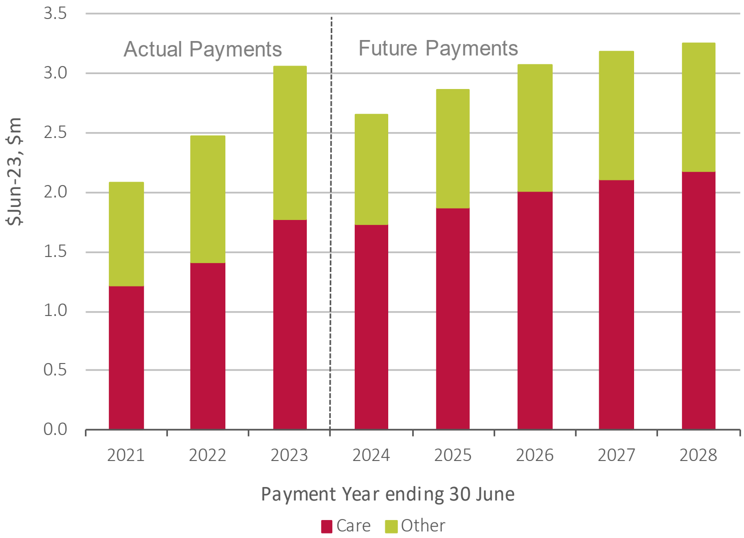


We estimate around $42m will be paid in Income Support to Other Serious Injury claims in 2024. Future payments will generally reduce over time in line with expected mortality, retirement and s56A elections, although the emergence of IBNR claims means projected payments remain fairly stable for the next three years. The projection of significant backpay over the next few years is driven by the expected resolution of combining disputes resulting in more Serious Injury claims.

8.5.5 Care and other costs

Figure 8.14 shows historical and projected care payments for Other Serious Injury claims (including IBNR claims).

Figure 8.14 – Care and other payments: Other Serious Injury claims ($Jun23)

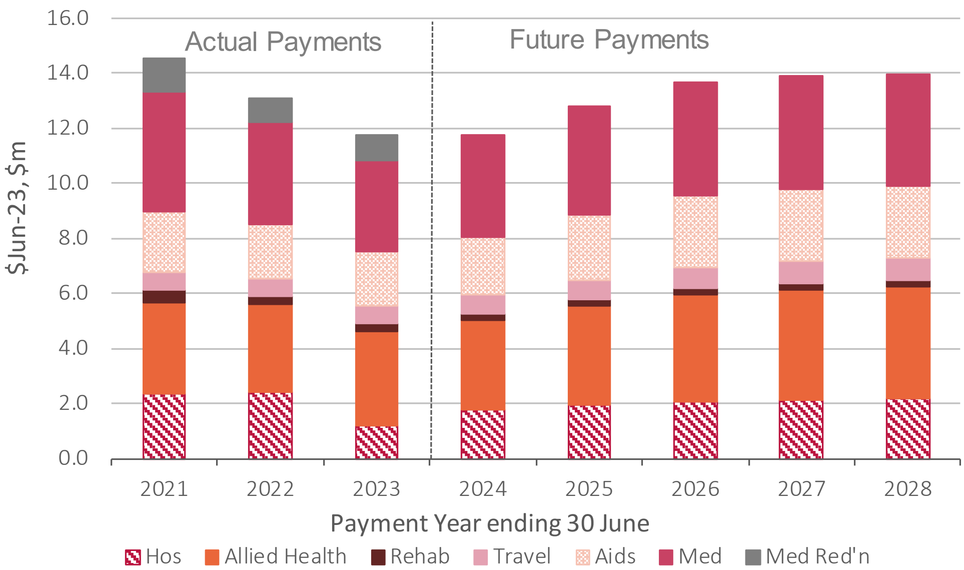


Other Serious Injury claims receive relatively little in care and other costs, although payments have been growing which is partially driven by increased modifications spend. We expect around $2.6m in care and other payments in 2024. This is expected to increase due to IBNR claims, offset by expected medical redemptions and mortality.

8.5.6 Treatment and related costs

Figure 8.15 shows historical 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 8.15 – Treatment and related payments: Other Serious Injury claims ($Jun23)



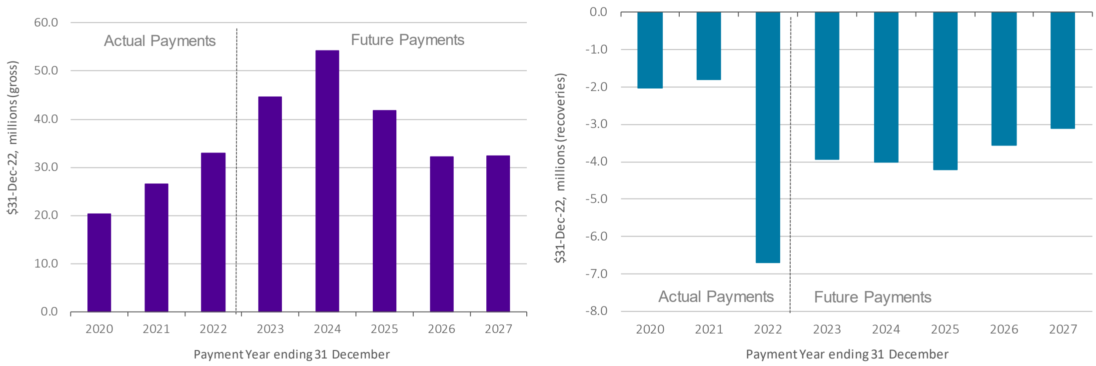
We expect treatment and related payments of $12m in 2024, similar to the average over the last two years. Payments increase in future years due to IBNR claims, offset by reductions over the longer term in line with mortality and expected medical redemptions.

8.5.7 All other payments

Figure 8.16 shows historical and projected other benefits for Other Serious Injury claims (including IBNR claims).

Figure 8.16 – All other payments: Other Serious Injury claims ($Jun23)

Gross Costs **Recoveries**



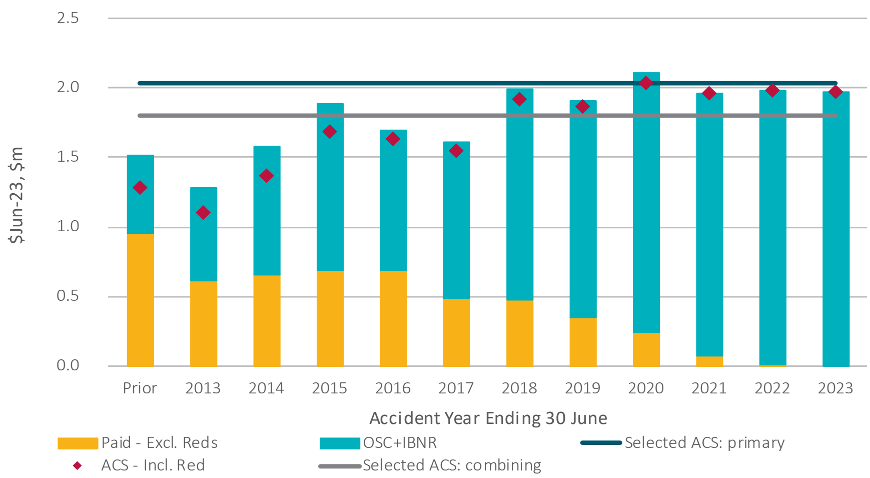
Our future projections include (in current dollars):

- Lump sum and s56A benefits of $173m paid to Other Serious Injury claims who have not yet had a lump sum paid; these are assumed to happen relatively quickly
- Income and medical redemption benefits of $8m, also assumed to happen relatively quickly
- Legal and investigation costs of $19m
- Recoveries of $18m.

8.5.8 Overall average size

Figure 8.17 shows the net ultimate average claim size (in 30 June 2023 values) across all Other Serious Injury claims.

Figure 8.17 – Average size by payment type: Other Serious Injury claims



Our estimated total average size is $2.0m for primary injuries and $1.8m for combining injures. Recent accident years generally sit between our selected primary and combining injury average size, as they are made up of a mix of primary and combining injuries.

At the previous valuation, we assumed the size differential between combining and primary claims to be 7.5% for Income Support and 20% for Medical benefits. Recent claims experience suggests that Income Support claims are arising in line with this differential, however the Medical size differential is not emerging as great as was previously allowed for; we have therefore reduced the Medical size differential to 10%.

More detail on the selections underlying our adopted average sizes can be found in Appendix A.12.

9 Economic and other assumptions

9.1 Discount rate

The discounted mean term (DMT) of the liabilities is 11.5 years, higher than the previous valuation of 11.3 years. The high DMT is driven by the large proportion of the OSC that relates to Serious Injury liabilities. As a result, even relatively small changes to economic assumptions can have a material impact on the liability.

9.1.1 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.

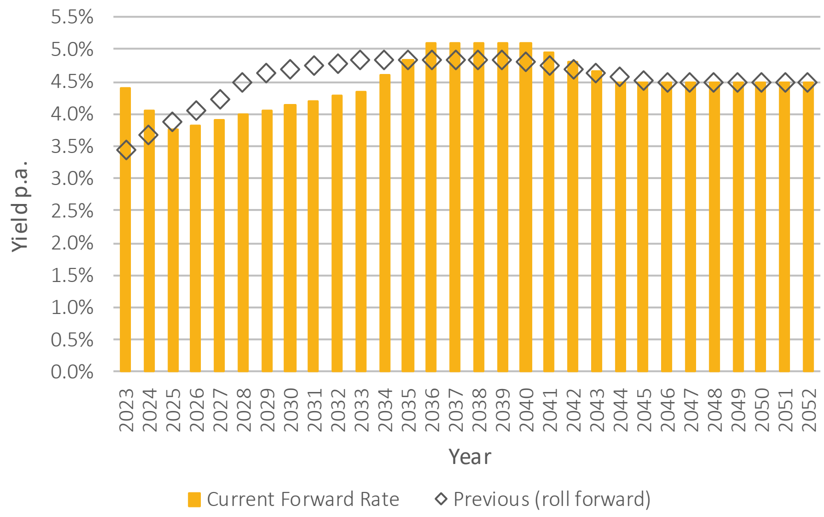
9.1.2 Current assumptions

At very short durations, there has been a material increase in discount rates, where yields have increased by as much as 95 basis points. At short to mid durations yields have decreased by 10 to 60 basis points, while at mid to long durations yields have increased up to 25 basis points. Our assumed very long-term discount rate of 4.50% is unchanged from our previous valuation.

A comparison of the currently adopted yield curve to previous is shown in Figure 9.1.

The equivalent single discount rate increased marginally from 4.35% p.a. at 31 December 2022 to 4.37% p.a. at 30 June 2023.

Figure 9.1 – Risk free forward rate vs previous valuation



Details of the discount rates by year are included in Appendix C.1.

9.2 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, and this is also a consideration when selecting our inflation assumptions.

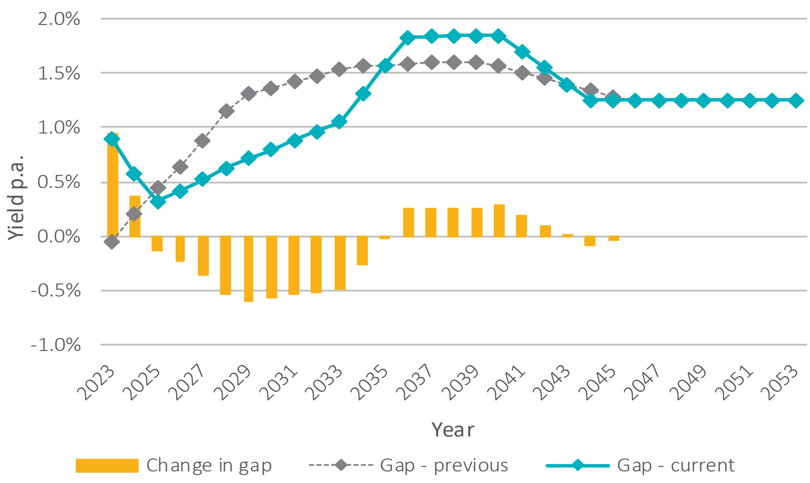
In summary, our assumptions at the current valuation are:

- Similar to our previous valuation, Wage Price Index (WPI) inflation has been assumed to be 3.50% p.a. for the next year, reducing to 3.35% p.a. in five years' time. This shape reflects the current economic environment and tight labour market, leading to a higher wage inflation allowance in the short term than in the long term.
- WPI inflation assumptions then reduce slowly over the following 10-year period, after which it remains steady at 3.25% p.a. This long-term assumption represents a 1.25% p.a. gap between WPI inflation and forward discount rates, unchanged from our December 2022 valuation.
- Average Weekly Earnings (AWE) inflation is set as equal to WPI inflation plus a gap of 0.25% for all periods. This is likewise unchanged from our previous valuation.

- CPI inflation is assumed to be 3.5% p.a. in the next year before dropping to 3.0% p.a. in the following year. This reflects the current high inflation environment and the RBA's expectations that inflation will drop to the upper end of the target range of 2% to 3% by June 2025.
- CPI inflation is then flat at 2.50% p.a. for all remaining future years. This is up unchanged from the previous valuation. The long-term selection sits in the middle of the Reserve Bank's targeted range of 2-3% p.a.

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 short to mid durations. This is shown in Figure 9.2 below. As this shows, the current economic assumptions imply a bigger gap at very short durations and longer durations, offset by a lower gap at mid durations.

Figure 9.2 – Gap between adopted AWE and discount rates



The net impact of these changes on the scheme liability is to produce a small increase (in the context of the scheme's overall liabilities), and is quantified in Section 10.

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.

9.3 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.

Table 9.1 shows the allocated CHE expenses as a proportion of claim payments over the past five years along with the project for 2023/24 and the selected CHE assumption.

Table 9.1 – Scheme expenses rate (% of claim payments)

	CHE Expenses / Claim Payments - by financial year					CHE Assumption	
	2019-20 Actual	2020-21 Actual	2021-22 Actual	2022-23 Draft Actual	2023-24 Budget	Selected	Previous
Serious Injury	7.7%	7.2%	6.2%	4.4%	7.1%	7.0%	7.5%
Short Term Claims	13.4%	15.4%	14.8%	15.8%	16.1%	16.0%	15.5%
Liability Weighted Average %						10.0%	10.1%

The reduction in the Serious injury rate in 2023 relates to the significant increase in serious injury payments (from redemptions and lump sum payments) in this period, and not a reduction in actual cash expenses. As this shows, scheme expenses have been increasing relative to cash flows for short term claims and decreasing for serious injury claims. The assumptions for our claims handing expense allowances for the outstanding claims valuation are as follows:

- For serious injury claims the allowance is 7.0%, lower than the 7.5% loading at the previous valuation. With the growing scale of the Serious Injury cohort it is not surprising that the loading has reduced.
- For short term claims the allowance is 16.0%, up from 15.5% at the previous valuation. The higher costs largely reflect the higher than anticipated claims management effort in managing WPI assessments (many of which are emerging well later than expected) and associated disputes.

The overall expense rate equates to 10.0% of gross outstanding claims, slightly lower than 10.01% at the previous valuation.

9.4 GST recoveries

Entitlements are modelled net of GST (ITC) recoveries.

9.5 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.

In addition to the underlying variability in our projection of future claim costs, the risk margin has been updated to incorporate the additional uncertainties related to the 2022 reforms. Importantly, the reforms did not remove the "combining uncertainty" that was introduced after the *Summerfield* legal decision, but rather they modify it by introducing other elements of legislative change – each of which has their own uncertainties that need to be considered in assessing the overall risk margin.

We have undertaken a high-level review of the risk margin scorecards for internal and external systemic risks at this valuation. Our approach is based on the key elements of the framework proposed by the Institute of Actuaries of Australia's Risk Margin Taskforce in their paper "Framework for Assessing Risk Margins" ('the task force paper'). Specifically, we have examined Coefficients of Variation (CVs) – 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.

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 estimate of the underlying CVs for each entitlement group, along with the total diversified and undiversified CV, are set out in Table 9.1 below.

Table 9.2 – Underlying co-efficient of Variation

	Total CV	
Risk Margin Group	Jun-23	Dec-22
Serious Injury	33.2%	38.5%
Short Term Claims		
Income Support	14.5%	14.5%
Lump sum	29.2%	32.7%
Legal + Investigation	30.3%	30.3%
Medical and Other Treatment	24.2%	15.8%
Recoveries	20.0%	20.0%
Total (Undiversified)	31.0%	34.7%
Total (Diversified)	25.3%	29.2%
Diversification	15.8%	15.8%

The changes to note are:

- A decrease in the Lump Sum CV due to reduced uncertainty around average size selections for combining injuries partly offset by increased uncertainty around hearing loss lump sum numbers.
- A decrease in the Serious Injury CV due to reduced uncertainty around combining injuries and reform impacts.
- An increase in Medical and Other Treatment due to increased tail risk for Hearing Loss aids and appliances costs.

Based on a diversified coefficient of variation of 25.3% and our modelled distribution (which is a blend between a normal and lognormal distribution), we have selected a risk margin of 16.5%, a reduction of 1.6% from the previous risk margin (18.1%).

We note that if the reforms achieve their stated aims, that is without there being any material behavioural response or adverse legal decisions that undermine their intent, then we would expect the risk margin to continue to reduce back toward (or even below) the underlying risk margin level over the next 12-18 months.

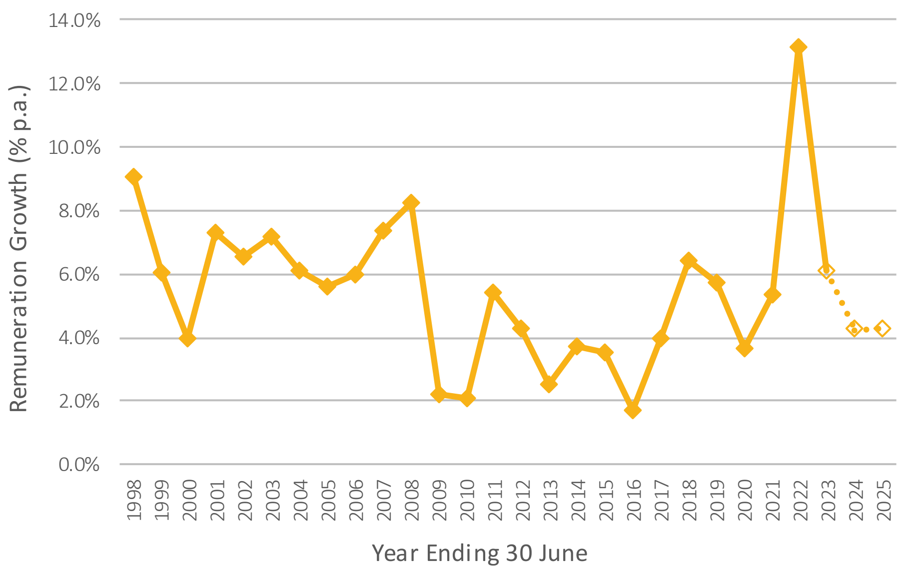
9.6 Non-exempt remuneration

When making our assessment of the cost of claims, we consider the underlying insured employee 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) 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 9.4.

Figure 9.3 – Non-exempt leviable remuneration: annual growth



We have adopted ReturnToWorkSA's remuneration projection of $39.6 billion for 2022/23, noting that it is still subject to estimation as wage declarations are not yet complete. 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) and a change in the definition of leviable remuneration from 1 July 2008 (to exclude wages for trainees and apprentices).
- 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.
- In the five years from 2017 to 2021 remuneration growth moved between around 4-6% (noting that wages growth for 2020 was impacted by COVID-19).
- 2022 then ended up with the highest growth rate in the history of the scheme at 13.1%.
- Strong growth is also forecast for 2023, at 6.1%, dropping to 4.3% in 2024 and after.

10 Valuation results

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

- The central estimate of outstanding claims as at 30 June 2023.
- 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 2023 and 30 June 2024.
- Reconciliation of results with 31 December 2022 projections.

10.1 Outstanding claims – central estimate

Our central estimate of the outstanding claims by entitlement type as at 30 June 2023 is set out in Table 10.1. This liability relates to all claims that occurred on or before 30 June 2023 and includes the impact of updated economic assumptions.

Table 10.1 – Central Estimate of outstanding claims by entitlement type

Entitlement Group	General Short Term Claims	Hearing Loss Claims	Serious Injuries	Total	% of Net Cent Est
	$m	$m	$m	$m	
Income	153	-	713	866	24%
Medical	77	91	389	557	16%
Other	5	0	51	56	2%
Care	2	-	415	417	12%
Lump sums	486	52	195	733	21%
Hospital	18	-	116	133	4%
Travel & Accomodation	6	1	46	53	1%
Worker legal	64	10	24	97	3%
Corporation legal	39	-	14	54	2%
Allied Health	30	24	223	278	8%
Rehabilitation	12	-	13	24	0.69%
Investigation	2	2	1	5	0.14%
Common law	1	-	-	1	0.04%
Commutation	4	-	-	4	0.11%
LOEC	0	-	-	0	0.01%
Redemptions	1	-	8	9	0.25%
Gross Liability	901	180	2,207	3,288	93%
Recoveries[1]	-40		-28	-68	-2%
Expenses	144	29	154	327	9%
Net Central Estimate	1,005	209	2,333	3,547	100%

[1]Recoveries not split between General Short Term and Hearing Loss claims

The outstanding claims liability before recoveries and expenses is estimated to be $3,288m. The net central estimate, allowing for recoveries and including an allowance for claims handling expenses, is $3,547m.

Table 10.2 details the outstanding claims result by accident year.

Table 10.2 – Central Estimate of outstanding claims by accident year

Accident Year	General Short Term Claims	Hearing Loss Claims	Serious Injuries	Total	% of Net Cent Est
	$m		$m	$m	
Pre Jun-15 Years	42	61	770	873	25%
Jun-16	16	8	94	118	3%
Jun-17	24	8	141	172	5%
Jun-18	45	10	201	257	7%
Jun-19	65	12	216	293	8%
Jun-20	86	14	186	286	8%
Jun-21	128	16	180	324	9%
Jun-22	190	19	198	407	11%
Jun-23	306	33	220	559	16%
Gross Liability	901	180	2,207	3,288	93%
Recoveries[1]	-40		-28	-68	-2%
Expenses	144	29	154	327	9%
Net Central Estimate	1,005	209	2,333	3,547	100%

[1]Recoveries not split between General Short Term and Hearing Loss claims

Table 10.3 shows the overall liability split between Serious Injuries and Short-Term claims, both before and after discounting. There is a significant level of discounting in relation to the Serious Injury claims liability due to its long payment pattern, with Hearing Loss claims also having a high level of discounting.

Table 10.3 – Impact of discounting

	General Short Term Claims	Hearing Loss Claims	Serious Injuries	Total
	$m	$m	$m	$m
Inflated	1,113	319	5,624	7,057
Inflated and Discounted	1,005	209	2,333	3,547
Ratio	90%	65%	41%	50%

10.2 Provision for outstanding claims

Table 10.4 sets out the components of our recommended provision at 75% probability of sufficiency, $4,132m.

As explained in Section 9.5, the recommended risk margin is 16.5%, down from 18.1%. Adopting this risk margin results in a risk margin of $585m being held.

Table 10.4 – Recommended balance sheet provision

	Central Estimate	Risk Margin	Recommended Provision
	$m	$m	$m
Gross Claims Cost - Serious Injuries	2,207		
Gross Claims Cost - General Short Term Claims	901		
Gross Claims Cost - Hearing Loss Claims	180		
Claims Handling Expenses	327		
Gross Outstanding Claims Liability	3,615	596	4,211
Recoveries	-68	-11	-79
Net Outstanding Claims Liability	3,547	585	4,132

We note that if the reforms achieve their stated aims, i.e. without there being any material behavioural response or adverse legal decisions that undermine their intent, then we would expect the risk margin loading to reduce back toward (or even below) the underlying risk margin level over the next 12-18 months.

10.3 Movement in liability

Our net central estimate including CHE is $35m higher than projected at the previous valuation, as shown in Table 10.5.

Table 10.5 – Movement from previous valuation

	Gross	Recoveries	CHE	Net
	$m	$m	$m	$m
Liability as at Dec-22	3,154	-70	318	3,402
Plus liability for claims incurred in the period	323	-7	41	357
Less Expected Payments to Jun-23	277	-9	37	306
Plus Interest (unwinding of discount)	55	-1	5	59
Liability Projected from Previous Valuation	3,254	-69	327	3,512
Current Valuation	3,288	-68	327	3,547
Difference	33	1	1	35

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

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

This split also allows calculation of the actuarial release, where we add the difference between actual and expected payments to the movement in the liability due to claims experience, to give a measure of the 'profit' impact of claims performance relative to the previous valuation. This results in an actuarial strengthening (i.e. cost increase) of $32m for the six months, as shown in Table 10.6.

Table 10.6 – Movement in central estimate and determination of actuarial release

	Liability Estimate[1]	AvE Payments in 6 mths to Jun-23	Actuarial Release/ (Strengthening) [2]
	$m	$m	$m
Liability at Dec-22 Valuation	3,402		
Projected Liability at Jun-23 (from Dec-22 valuation)	3,512		
Claims Movement - General Short Term Claims	31	4	-35
Claims Movement - Hearing Loss Claims	34	4	-38
Claims Movement - Serious Injury	-40	0	40
Impact of Change in economic assumptions	11		
Recommended Liability at Jun-23	3,547		
Total Actuarial Release/(Strengthening)			-32

[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.

10.3.1 Actuarial release at June 2023

The overall actuarial strengthening over the period is $32m. Table 10.7 shows this actuarial release split by entitlement type and entitlement type.

Table 10.7 – Actuarial release/(strengthening) by entitlement type

Entitlement Group	General Short Term Claims[1]	Hearing Loss Claims[1]	Serious Injury Claims[1]	Total Actuarial Release [1]	Release %
	$m	$m	$m	$m	
Income Support	4.5	-0.0	-13.2	-8.7	-1.0%
Redemptions	-1.9	-0.0	3.0	1.2	0.0%
Lump Sums	-18.0	-5.6	20.2	-3.4	-0.5%
Worker legal	1.3	-0.1	-3.3	-2.1	-2.3%
Corporation legal	0.9	-0.1	7.3	8.1	13.4%
Investigation	-0.1	-0.5	0.2	-0.4	-10.4%
Medical	-9.4	-19.0	31.5	3.0	0.5%
Allied Health	-3.6	-6.8	-2.6	-13.0	-5.1%
Other	0.2	-0.1	-4.1	-4.0	-7.7%
Care	-0.3	-	-26.1	-26.4	-7.0%
Hospital	-2.7	-0.0	9.1	6.3	4.4%
Travel	-0.9	-0.2	7.4	6.2	11.1%
Rehabilitation	-0.8	-0.0	1.3	0.4	1.6%
Common Law	0.1	-	-	0.1	7.7%
LOEC	-0.0	-	-	0.0	-0.9%
Commutation	0.3	-	-	0.3	7.1%
Gross Liability	-30.5	-32.4	30.6	-32.3	-1.0%
Recoveries	3.9	0.0	-3.3	0.6	-0.8%
Expenses	-8.2	-5.3	13.1	-0.4	-0.1%
Net Central Estimate	-34.9	-37.7	40.4	-32.1	-1.0%

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

The major movements at the current valuation are:

- For **General Short Term Claims** there is an actuarial strengthening (cost increase) of $34.9m, due to:
  - > An increase of $18m for Lump Sum costs, with the key drivers being:
    - – An $11m increase due higher than expected numbers of claims receiving a lump sum, particularly in the 2018 to 2021 accident years.
    - – A $9m increase due to a higher allowance for the number of future 30-34% WPI lump sums, as fewer claims are now expected to reach the Serious Injury claim WPI threshold and instead will remain as a Short Term Claim (this offsets some of the savings on Serious Injury claim numbers that are captured below).
  - > A $17m increase for Treatment related costs (Medical, Hospital, Physical Therapy, Travel, Other) due to higher average payment sizes.
  - > An increase in the claims handling expense loading ($8m), with more expenses being allocated to Short Term Claims.
  - > Some smaller offsetting savings resulted from Income Support ($5m release, following continuing better RTW outcomes) and Recoveries ($4m release).
- For **Hearing Loss Claims** there is an actuarial strengthening (cost increase) of $37.7m, due to:
  - > A $19m increase for Medicals, primarily relating to medical aids and appliances where the 'tail' of costs is continuing at a higher level than previously assumed (as more claimants are accessing hearing aids for longer).

    - A $7m increase for Allied Health, primarily relating to the fitting fees associated with hearing aids; this increase mirrors the increase in aids.
    - An increase of $6m relating to lump sums, following the higher claim reports and indications of an increasing proportion of claimants receiving a lump sum.
- For **Serious Injury claims** there was an overall actuarial release of $40.4m, due to:
    - A $64m net reduction as a result of claim number changes, comprising:
        - A $48m increase due to higher *primary* Serious Injury claim numbers. A small number of Severe Traumatic Injury claims with very high care needs contributed to this result.
        - A $111m decrease for claims who are *combining injuries* to reach Serious Injury, where fewer than expected claims are reaching the Serious Injury threshold due to combining injuries (see Section 5.2.3), but those who are emerging are tending to have a higher than expected claim size.
    - A $22m increase due to s56A and redemption assumptions. This recognises the latest information on claims, including claimants' response to redemption offers and changes in claimant circumstances that indicate a lower likelihood of taking a s56A payment, as well a small revision to the profile of claims that are anticipated to take a medical redemption.
    - A $15m increase due to other changes. The main driver was an increase in expected income support spend for Other Serious injury claims.
    - The allowance for expenses has reduced by $13m due to a decrease in the expense allowance from 7.5% to 7.0%.

Other changes had more minor impacts on the scheme liability.

10.3.2 Impact of economic assumption changes

Changes to inflation and discount rate assumptions increased the net central estimate by $11m.

Overall, compared to what was adopted at the December 2022 valuation, the current economic assumptions imply a bigger gap at very short durations and longer durations, offset by a lower gap at mid durations.

10.4 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 2023.

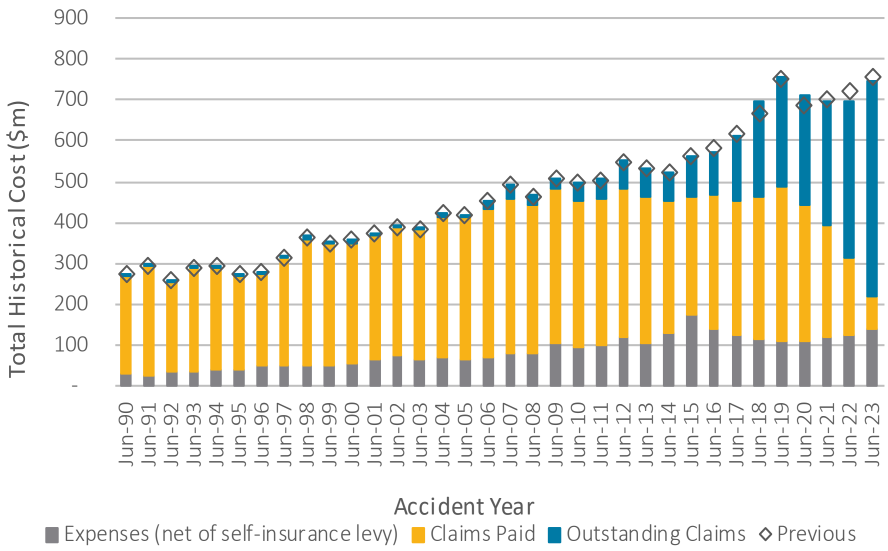
Figure 10.1 summarises the currently estimated historical costs for each year since the scheme began. As this shows, commencement of the RTW Act had initially acted to contain the cost for accident years up to 2016 at around $550m, breaking the strong upward trend seen in the lead up to that time. Scheme expenses were particularly high in 2015 as a result of additional transition related costs.

For recent accident years the costs are projected to be higher than the pre-2016 level as a result of:

- Growth in the number of Serious Injury claims that are expected to ultimately emerge. This is compounded by the cohort of claims which are impacted by combining injuries.
- Higher claim numbers, particularly for Hearing Loss claims.
- There was a period of deterioration in RTW outcomes up to 2019, before the trend reversed in 2020 and later years.

- For 2019 there are 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 reflects the volatile nature of Severe Traumatic Injury 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 2019.

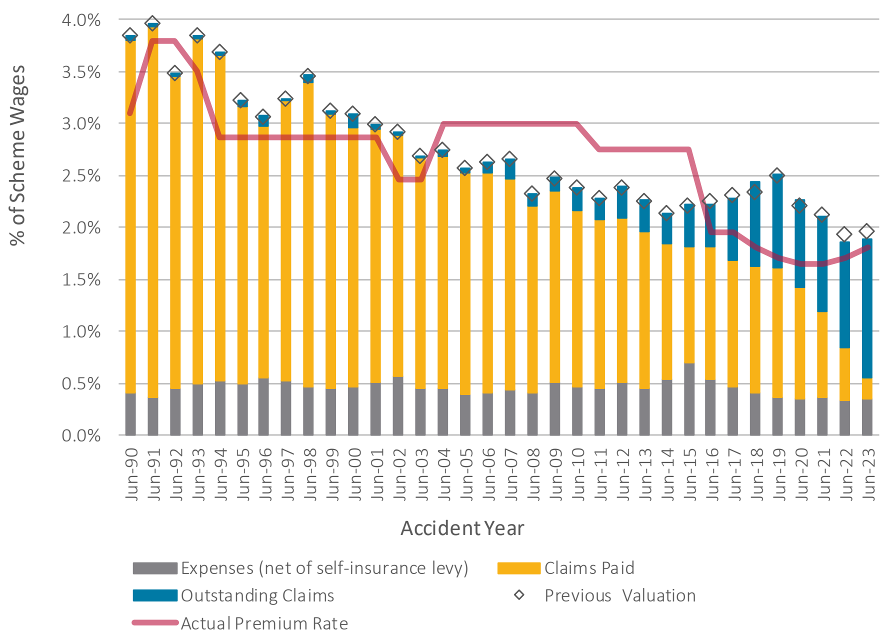
Figure 10.1 – Historical cost discounted to accident year



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 10.1) by the total scheme leviable remuneration in that year (discussed in Section 9.6). 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 10.2 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 10.2 – 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 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.
- Costs are higher for 2016 to 2019, due to the introduction of the Economic Loss Lump Sum as part of the 2015 reforms. The 2018 and 2019 years continue to develop as high cost years, due to a combination of poor early RTW outcomes, higher levels of Lump Sums, and higher than normal Serious Injury costs.
- The BEP estimates for 2020 and 2021 are lower than 2019, due to improved RTW rates and fewer projected Lump Sums and Serious Injury claims.
- A further reduction is projected for 2022 and 2023 claims, where further RTW improvements are impacting – the BEP rates for these two years also benefit from the growth in exposure, as to date this has not being matched by growth in claim numbers or costs. These improvements have reduced the current estimate of the BEP (using risk free rates) for the 2023 accident year to 1.90% of wages, down from 1.99% at the December 2022 valuation.

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 reform, which is still subject to a high degree of estimation uncertainty.

10.5 Future cash flows

Table 10.8 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 10.6, but make no allowance for expenses.

Table 10.8 – Projected cash flows

Entitlement Group	Projected Cashflows for Period			
	Jun-23 to Dec-23	Dec-23 to Jun-24	Jun-24 to Dec-24	Dec-24 to Jun-25
	$m	$m	$m	$m
Income Support	86.3	88.8	91.3	93.6
Medical	36.7	37.0	38.2	38.4
Lump sums	87.6	95.8	99.2	102.8
Rehabilitation	5.5	5.6	5.8	5.8
Allied Health	16.7	17.0	17.6	17.8
Hospital	11.2	11.2	11.9	11.9
Legal - Non-Contract	11.1	11.1	11.4	11.6
Other	2.1	2.2	2.2	2.3
Care	8.5	8.6	9.9	10.0
Legal Contract	11.5	11.4	11.7	11.8
Travel	3.3	3.4	3.5	3.5
Investigation	1.2	1.2	1.2	1.2
Commutation	0.4	0.4	0.4	0.4
LOEC	0.1	0.1	0.1	0.0
Common law	0.1	0.1	0.1	0.1
Recoveries	-8.3	-8.3	-6.9	-7.0
Redemptions	3.7	1.8	0.7	0.6
Net Claims Cost - Total	277.8	287.3	298.3	305.0
Serious Injuries (net)	62.8	65.5	69.7	74.5
Short Term Claims (net)	214.9	221.8	228.6	230.4

Cash flows for Short Term Claims are expected to grow at just above inflation, while the Serious Injury cashflows are projected to continue growing over time as the portfolio is yet to reach maturity.

10.6 Projected outstanding claims

Table 10.9 shows the outstanding claims projected to 31 December 2023, 30 June 2024 and 31 December 2024. We note the payments shown here are based on those in Table 10.8, 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 assume that outcomes emerge exactly as projected over time, including in relation to economic factors. These projections also assume that the current risk margin is maintained over time, which will hopefully not prove to be the case – as explained in Section 9.5, if the reforms operate as intended then it is hoped that the risk margin loading will reduce over the next 12-18 months.

Table 10.9 – Projected outstanding claims provision

(31 December 2023, 30 June 2024 and 31 December 2024)

	Half year ending		
	Dec-23	Jun-24	Dec-24
	$m	$m	$m
Provision at Period Start	4,132	4,270	4,407
Less Risk Margin	585	605	624
Central Estimate at Period Start	3,547	3,665	3,783
Plus Additional Liability Incurred in Period	354	362	369
Less Expected Payments in Period	-318	-328	-341
Plus Interest (unwind of discount)	81	84	80
Projected Central Estimate at Period End	3,665	3,783	3,891
Plus Risk Margin	605	624	642
Projected Provision at Period End	4,270	4,407	4,533

We project the central estimate for the net outstanding claims liability at 31 December 2023 to be $3,665m; 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 2023 to 31 December 2023. The corresponding provision at a 75% probability of sufficiency is $4,270m.

The projected increase to the 31 December 2023 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.

10.7 Reconciliation of incurred cost with previous projection

At the 31 December 2022 valuation we projected an additional claim cost liability of $316m would be incurred from claims arising in the half-year to 30 June 2023. Our current projection for the ultimate value of this liability is $312m, a reduction of 1.0% or $3m.

Table 10.10 – Comparison of December 2022 projections to current valuation

For period 1 Jan 2023 to 30 Jun 2023		
Incurred Claims Liability ($m, excl. expenses):		Difference
Projected in Dec-22 Valuation	316	
Incurred (current valuation)	313	-1.0%

11 Uncertainty and sensitivity analysis

11.1 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.

In addition to the underlying uncertainties in our projection of future claim costs, there are still additional temporary uncertainties related to the 2022 reforms. Importantly, the 2022 reforms do not remove the "combining uncertainty" that was introduced after the *Summerfield* legal decision, but rather they modify it by introducing other elements of legislative change, each of which has their own uncertainties that need to be considered (and this is particularly so for the transitional rules which will determine how much balance sheet saving ultimately emerges from the reforms).

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.
- Reform – outcomes relating to the impact of reforms, focussing on Serious Injury numbers and the s56A election
- 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, and it is possible that multiple impacts could emerge at once that would lead to larger overall impacts than shown in the specific scenarios.

11.2 Economic scenarios

In brief, the scenarios we have considered are a stronger economy, a weaker economy and an unexpected wage inflation 'spike' that saw wage inflation increase to 5% p.a. for the next two years; as summarised below.

Table 11.1 – Economic Scenarios

	Stronger	Weaker	Inflation spike
Wage inflation[1]	4.0% pa	3.25% to 3.5% pa	5% p.a. in next two years, before reverting
Investment earnings	6.0% pa	3.25% to 3.5% pa	Unchanged
Real Long-term 'Gap'[2]	2.0%	0.0%	Unchanged

[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 11.2 – Economic sensitivities

	OSC Impact	
	$m	%
30 Jun 23 OSC estimate (Including risk margin at 75% POS)	4,132	
Stronger Economic Scenario (2% gap between inflation and discount rate)	-392	-9%
Weaker Economic Conditions (0% gap)	+544	+13%
Temporary wage inflation 'spike'	+60	+1%

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 $390m. Of course, conditions can also move the other way, as they have a number of times over the last few years.

Following increases in price inflation over 2022 and early 2023 it is possible that wage inflation could increase more than anticipated, and a scenario whereby wage inflation increased to 5% for two years before reverting back to the normal allowances would increase the liability by $60m.

11.3 Expenses scenario

If the adopted claims handling expenses were to deteriorate then the loading could be tens of millions higher, as shown below.

Table 11.3 – Expenses sensitivities

	OSC Impact	
	$m	%
30 Jun 23 OSC estimate (Including risk margin at 75% POS)	4,132	
Scheme expenses are higher than allowed (17.0% for STC and 8% for Serious Injuries)	+38	+1%

11.4 Short term claim scenarios

Commencement of the RTW Act brought significant change to the scheme and areas of change in the scheme's culture. In recent years there has been wide variation in claim patterns, covering RTW outcomes, dispute lodgement, WPI assessment and in attempts to add 'additional injuries' to claims. It is possible that the scheme experience could either outperform or underperform relative to current projections, and the actual outcomes that emerge over time will depend strongly on the claims management approach and behaviour of scheme participants.

Table 11.4 summarises a number of sensitivities that help demonstrate the potential for variability in the Short Term Claim cohort.

Table 11.4 – Short Term Claim sensitivities

	OSC Impact	
	$m	%
30 Jun 23 OSC estimate (Including risk margin at 75% POS)	4,132	
Claim numbers		
Number of claims (both total and for 10 days of IS) return to 2021 levels	+108	+2.6%
Hearing Loss numbers increase by 20% above current allowances, noting that claim numbers have more than doubled in recent years	+49	+1.2%
Income Support		
RTW improvements disappear, resulting in IS costs returning to 2018 levels	+63	+1.5%
Front end continuance assumptions set at the best of experience in the last three years (NB: this is the IS saving only)	-14	-0.3%
Treatment costs		
Hearing loss aids and appliances cost continue for longer in the tail	+42	+1.0%
Superimposed inflation emerges at 2% per annum for Medical	+35	+0.8%
Legal fees		
Contract Legal costs increase in line with dispute numbers	+16	+0.4%
Higher average cost of legal fees for all claims due to disputes progressing further in the disputation process	+48	+1.2%
Lump Sums		
Lump sum claim numbers emerge at 2019 levels for all recent accident years	+124	+3.0%
First Paid and Economic Loss lump sums continue to emerge at higher sizes, in line with the 2022 experience	+31	+0.8%

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

- A reversal of recent improvements in claim numbers, such that numbers increased back to 2021 levels, would increase Income Support, Lump Sum and flow-on costs by around $108m.
- A 20% blanket increase in Hearing Loss claims would add $49m to the liability. To put this sort of increase into context, Hearing Loss claims have more than doubled in recent years.
- For Income Support costs:
  - If the recent RTW improvements were to end and the claims experience reverted to levels seen in 2019, then Income Support costs would increase by $63m. There would also likely be flow on increases to other costs that we have not captured in this scenario.
  - On the flip side, if the most recent very favourable RTW outcomes can be maintained then this will lead to a further $14m of saving. Again, there are likely to be flow on savings from other benefit types if this scenario is achieved.
- Treatment costs:
  - More recent accident years are not anticipated to have as many claims receiving hearing aids in the very long term, due to an older cohort of claimants. If these claims do in fact continue to receive hearing aids on a more frequent basis, this could add $42m to the provision.
  - A superimposed inflation allowance of 2% for Medical payments would add $35m to the provision.
- Dispute related costs continue to be very high, and there are very plausible scenarios relating to the volumes of disputes and/or the length of disputes (i.e. more claims progressing further into the disputation process) that could see $48m added to legal costs.

- Lump sums are impacted by multiple areas of uncertainty at the moment, including:
  - > If Lump Sum claim numbers stay at 2019 levels (around 25% extra claims), this would add $124m to the provision. This scenario focuses on accident periods 2020 to 2023, where we are forecasting that experience will improve compared to 2019 as a result of the improved RTW outcomes.
  - > The assumed average sizes for Lump Sums are currently below the high-end of the most recent experience, as we believe that dispute settlement had temporarily pushed sizes higher than normal, but if future claims were to have similar sizes then this would add $31m to the provision.

11.5 Serious Injury scenarios

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

Table 11.5 – Serious Injury sensitivities

	OSC Impact	
	$m	%
30 Jun 23 OSC estimate (Including risk margin at 75% POS)	4,132	
Higher than expected SI numbers by 10 extra claims per year for recent years	+129	+3%
Return to work rates improve with RTWSA initiatives (but only if claimants don't use this to maximise s56A payouts)	-87	-2%
Unpaid care on EnABLE cohort ceases immediately and is replaced with paid care	+127	+3%
Uncertainty around mortality - impact of all EnABLE claims having mortality in line with standard population life expectancy	+439	+11%
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.	+245	+6%
Superimposed inflation is 1% p.a. lower than assumed for medical and care.	-339	-8%
No increase in utilisation of Care benefits after age 65	-94	-2%
Twice the additional allowance for utilisation of Care benefits after age 65	+26	+1%
NDIS Care rates increase at 10% p.a. for the next three years	-3	-0%
Uncertainty around mortality - impact of removing the allowance for mortality improvement for identified claims and immediately reflecting any change in the average size applied to IBNR numbers	-148	-4%
Combining numbers continue to emerge lower than expected	-125	-3%

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. For example, if the number of Serious Injury claims is 10 higher per year for recent accident years the provision would increase by around $141m. Our allowance for future Serious Injury claims are a very small portion of the claims that are still in the system and so even a slightly higher conversion rate would have material implications for the liability. Conversely, as discussed in Section 5.2.3, the number of combining Serious

Injury claims to date has been lower than anticipated and we have only partially responded to experience so far. If experience continues to emerge lower than expected then releases in excess of $100m are plausible.

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

While we had previously highlighted the very large potential financial benefits if recently commenced programs manage to help more participants return to work than in the past, we note that under the reformed scheme the level of savings is likely to be reduced as claimants will now be able to access the s56A payment.

We have also tested some reform specific sensitivities in Table 11.6.

Table 11.6 – Serious Injury reform sensitivities

	OSC Impact	
	$m	%
30 Jun 23 OSC estimate (Including risk margin at 75% POS)	4,132	
Number of Serious Injury claims removed by threshold change only half of expected	+173	+4%
s56A and medical redemptions achieve little savings (either through low take-up rate or due to rational decisions by workers)	+99	+2%

Material savings have been built into the valuation due to the anticipated impacts of the 2022 reforms; however, there is currently very little actual experience to evaluate these anticipated savings. The key uncertainties are around the proportion of Serious Injury claims removed due to the threshold change and the overall take-up rate and profile of claims who make a s56A election and/or agree to a redemption. Based on our sensitivities:

- If significantly fewer than expected claims are removed due to the threshold increase, then increases of $150-200m are plausible. Conversely, there is also the potential for greater reductions than anticipated.
- s56A and redemption experience is still very immature, and could ultimately be significantly different than our valuation allowances. If experience is much poorer than expected, through either lower take-up rates or take-up being more biased towards lower cost claims, then increases of up to $100m (on the provision) are possible.

11.6 Key uncertainties

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

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

- **Reform impacts** – rather than removing the ability to combine injuries, the 2022 reforms introduced other changes that attempt to manage the financial consequences of claimants getting higher WPI scores. As a result, the uncertainty relating to the impact of combining injuries is now compounded by the uncertainty around the success of the reforms in removing costs from other areas. Noting that 90% of new Serious Injuries in the last six months were still determined under the old rules, this means a significant portion of the valuation is still largely based on assumed outcomes, rather than on a reliable history which is the usual approach for producing actuarial estimates. While we believe our assumptions and projections are reasonable given the information available, the uncertainty is elevated compared to normal.

- **Behavioural risk** – related to the above, the ultimate outcomes that emerge directly depend on how claimants and their advisors seek to achieve higher WPI scores than in the past, now that the ability to combine injuries is a codified feature of the scheme; further, after the 2022 reforms, the incentives have changed such that claimants are now likely to simply seek the highest WPI. Given the high level of legal involvement in the scheme, the risk of adverse behavioural change is high. As an example of this, claimants are changing their behaviour to try to add more injuries to their claim than was seen in the past.
- **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. Given the high volume of disputes, despite a number of 'key cases' having resolved over recent years, this risk is also assessed as high. Until a clear and decisive legal position is established as to how the scheme should operate in practice, this risk will remain. Compounding this are:
  - The introduction of new legislative provisions which will inevitably lead to new areas of challenge
  - Precedent that fully defines the boundaries on how and when injuries can be combined is still to be established; that is, the *Summerfield* decision's requirement for an 'evaluative test that is to be applied adopting a common sense approach' has not provided comprehensive guidance on how and when injuries should be combined.
- **WPI assessments** – under the RTW Act, small changes in the WPI score can equate to many tens of thousands of dollars in some cases, and WPI assessments also govern access to the significant compensation available under the Serious Injury benefit package. The scheme will face significant financial consequences if this leads to any form of 'WPI creep'.

  Given there is no current legislative tool that addresses the 'tail risks' that have emerged from behaviour changes since the RTW Act commenced, there is a chance that outcomes will be different to expected. Indeed, the inclusion of higher lump sum amounts in conjunction with the ability to combine injuries over time arguably creates an environment which encourages claimants to delay their WPI assessments in pursuit of higher WPI scores.

  As explained in Section 1.3, our work makes no allowance for potential changes to WPI scores as a result of the current Review of the Impairment Assessment Guidelines; if any changes to WPI scores result from this Review they will need to be factored into future valuation work.
- **Serious Injury claim costs** – these claimants are entitled to benefits for life, and the risks for this group relate to factors that are common across most claims, meaning deviations from our assumptions could therefore compound across multiple years. For the current valuation the key uncertainties (beyond reform specific 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 (due to delayed WPI assessments, late surgeries, etc) as well as the number of outstanding Serious Injury application disputes and other WPI related disputes that could see claims ultimately meet the Serious Injury WPI threshold.
  - **Life expectancy** – the future life expectancy of Serious Injury claimants has a significant impact on future cost projections.
  - **Cost escalation** – the potential for future cost escalation in a number of medical, care and treatment related items poses a risk. A current example is the pressure on costs for care related specialists due to competition with the NDIS.
- **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 having high dispute volumes.

- **Hearing Loss claim numbers** – there has been unprecedented growth in Hearing Loss claim numbers in the last few years, which is now producing strong cost growth. If this continues further cost increases will eventuate.
- **Economic environment and inflation risk** – there is considerable uncertainty in financial markets, and this has impacted the discount rates used to determine the valuation results, which remain low by historical standards. With price inflation increasing quickly over the last year, there is a risk that this will flow into higher than anticipated wage inflation; if this occurs the scheme's liabilities would be impacted.

As context to our remarks above, it is important to remember that on current reporting patterns it takes around eight years until most Serious Injury claims are determined. As a result, in assessing the potential uncertainties that impact on current liability assessments, it is necessary to consider not just current behaviours but also what is likely to occur over (say) the next decade.

As demonstrated by outcomes in the last two years, despite the fact that the RTW Act commenced in 2015 there are still key areas of its provisions that are being tested in the courts, and hence there is uncertainty as to their 'real world' boundaries. The current valuation basis reflects our best estimate of how this experience will eventuate. Over time, our basis will further reflect the actual post-reform experience as it develops, and it is possible that the experience will differ materially from our current expectations.

12 Reliances and limitations

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

12.1 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 information source for this valuation was the guidance and input previously provided by ReturnToWorkSA's internal subject matter experts and legal advisors, who supported our work to estimate the likely impacts of the implementation of the 2022 reforms.

12.2 Uncertainty

12.2.1 Impact of Reform

The uncertainty at the current valuation is heightened by the impacts of the *Return to Work (Scheme Sustainability) Amendment Act 2022*. These amendments make very significant changes to the Scheme and there is only very limited direct information that can be used to estimate its impacts.

Consequently, there are significant uncertainties in our work and it is possible that outcomes could be materially different to our estimates. The uncertainty in this instance is heightened by the combination of the proposed legislative changes, which are expected to have significant impacts on the Scheme experience, and the codification of 'combining injuries' as an ongoing part of the Scheme's operations. Interpretation of trends and extrapolation of claims experience therefore become even more difficult, and we have prepared our estimates on the basis that they represent reasonable projections of the possible future experience of the Scheme.

A key uncertainty in determining the ultimate financial impacts of the reforms will be how significant, or not, behavioural changes are. As observed in the body of our report, South Australia's workers compensation system is regarded as being relatively litigious, and we have seen past examples of claimants changing behaviour in response to a change.

An important area that we have not been able to consider as yet (as there is no information available) is how the reforms will change the way Impairment Assessment Guidelines operate. These Guidelines are a crucial feature of how the Scheme works in practice given the legislative design's reliance on WPI assessments. If changes are made to the Guidelines that impact on WPI scores then the financial outcomes could be very significant.

12.2.2 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 continue to be higher than normal numbers of cases appealed 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.

12.2.3 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 continued level of ongoing legal challenge. While key features of the RTW Act came into effect back in July 2015, legal testing of its implementation is still occurring and is likely to take 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.

12.3 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, external screening continues to take place. As such, it is possible that more silicosis claims could emerge over time, and we will continue to monitor developments regarding this area of risk.

12.4 Reinsurance

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

12.5 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.

13 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.

2021-22

The ***Return to Work (Scheme Sustainability) Amendment Act 2022*** was passed in July 2022, with major changes to the scheme and claimant entitlements. The key changes relate to:

- Codifying the 'combining' of injuries for assessment of WPI, which is used to determine lump sum entitlements and serious injury eligibility
- Increasing the serious injury threshold to 35% WPI for physical injuries
- Revising the WPI scale for lump sum benefits to align to the increase of the serious injury threshold (by specifying the scale between 30 and 34% WPI)
- Allow seriously injured workers to elect to receive an economic loss lump sum (as per the economic loss lump sum scale) instead of ongoing income support entitlements
- Allow seriously injured workers to negotiate a settlement of their medical entitlements as a redemption
- Remove the concept of 'once and for all' impairment assessments with allowance for additional injuries to be assessed if they occur after an earlier impairment assessment is completed. These additional injuries cannot be combined with the earlier assessment and will be assessed individually.