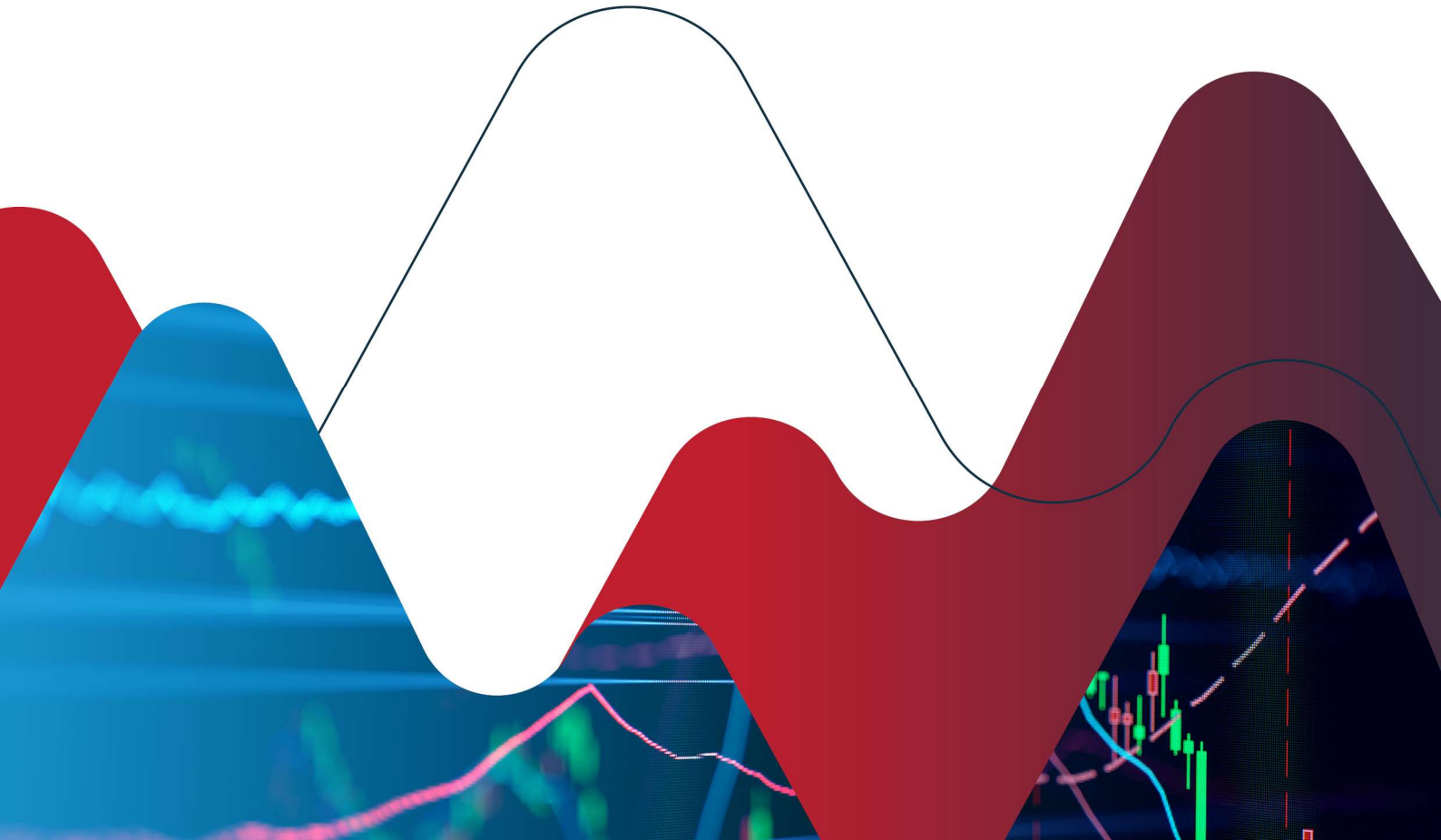
Australian Government

Australian Government Actuary

Actuarial Investigation into the Costs of Military Compensation

30 June 2022



Contents

1 Executive Summary

1.1 Background

1.1.1 This report has been prepared by the Australian Government Actuary (AGA) for the Department of Veterans' Affairs (DVA). It examines the liabilities in respect of Australian Defence Force (ADF) personnel as at 30 June 2022 under the *Safety, Rehabilitation and Compensation (Defence-related Claims) Act 1988* (DRCA) and the *Military Rehabilitation and Compensation Act 2004* (MRCA). Together these two schemes are known as the Military Compensation Scheme (MCS).

1.1.2 The MCS provides support and compensation to ADF personnel who sustain physical or psychological impairment or incapacity that is related to their defence service. This support ranges across income replacement for those who are unable to maintain full-time employment, coverage for medical, rehabilitation and related costs, financial compensation for permanent impairment, and benefits payable to dependents upon death.

1.1.3 At the highest level, our analysis draws a distinction between incapacity and non-incapacity payments. The former are income replacement payments, while the latter, for the most part, provide reimbursement of costs and compensation for non-economic losses. The valuation methodologies used for different types of payments reflect the particular characteristics of those payments and the nature of the available data.

1.1.4 The reported cashflows and liabilities have been divided between the run-off of the obligations under the DRCA and liabilities arising under the MRCA for claims attributable to service occurring on or after 1 July 2004 where relevant.

1.1.5 In response to the Royal Commission into Defence and Veteran Suicide, DVA are currently undergoing consultation in relation to potential legislative reforms related to existing compensation schemes including the MRCA and DRCA. As these have not been finalised at the date of the report, we have not given consideration to any potential impacts as a result of future changes to legislation in our modelling. However, we note that future outcomes could vary significantly from the results presented in this report should legislation be changed in the future.

1.1.6 The actuary responsible for the preparation of this report and the underlying analysis is Jane Miao, FIAA.

1.2 Scope of the Report

1.2.1 The analysis in this report looks at a number of financial measures of the scheme, including:

- the estimated liability as at 30 June 2022 for all outstanding claims under the DRCA, including those which have not yet been reported, and outstanding claims under the MRCA where the service giving rise to the claim predates the valuation date, again including those that have not yet been reported;
- the projected outstanding claims liability under the DRCA and MRCA for the 10 years following the valuation date, including the allowance for claims which are expected to occur over that period;

- the estimated cash flow for benefit payments over the same period; and
- the annual notional premium required to fully fund the estimated claims liability arising from service undertaken during 2022–23.

1.2.2 We have not considered the liability in relation to additional benefits payable on death and severe injury under the Defence Act 1903. The Department of Veterans' Affairs has no legal obligations in relation to these claims.

1.2.3 This report has been prepared for the purpose of advising Government of the nature and quantum of its liabilities in respect of compensation for military personnel injured in the course of duty. This report also forms the basis for our advice to DVA on reporting for financial statement purposes for the year following the valuation date. Adjustments are made to the results presented here to allow for the use of a discount rate which is considered to comply with the relevant Australian Accounting Standard (AASB 137).

1.2.4 Any proposed use of this report or parts of this report which go beyond its stated purpose should be discussed first with AGA.

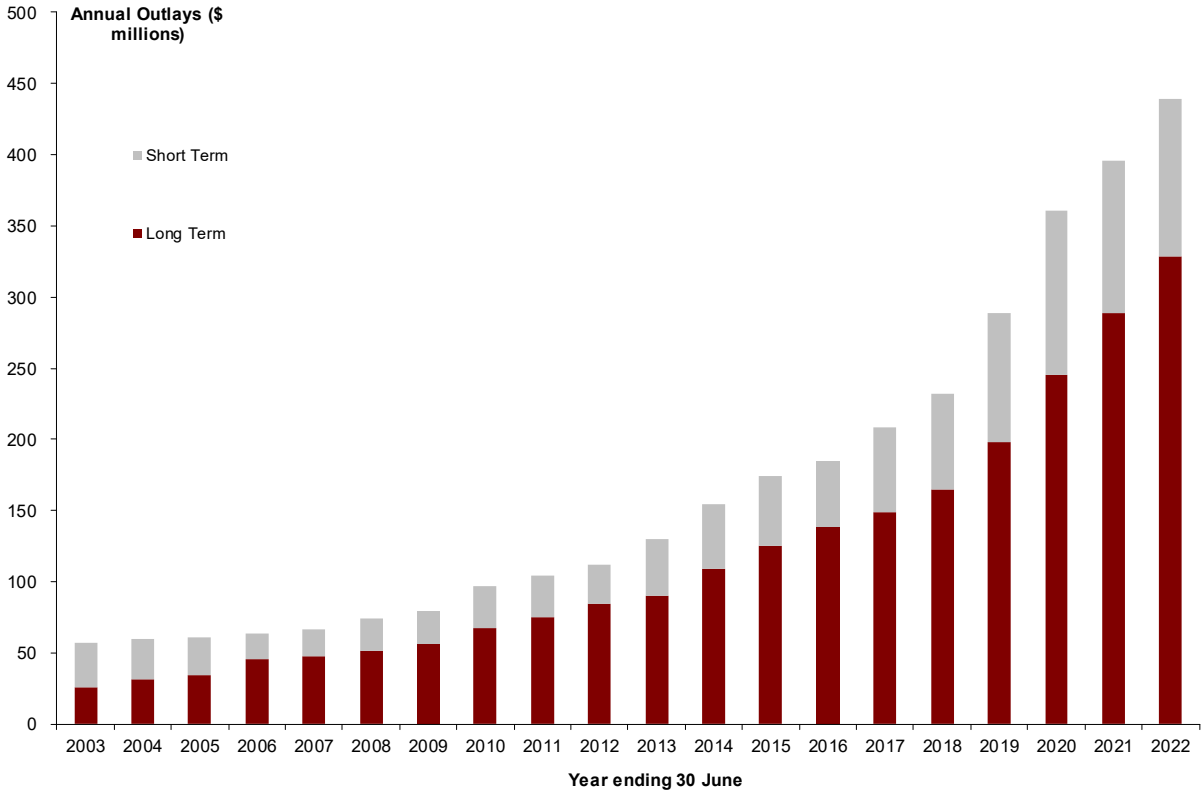
1.3 Recent Claim Experience

1.3.1 For this valuation, we were provided with unit record payment data which covered the period to 31 December 2022. Under the incapacity heading, we make a distinction between those who have been in receipt of benefits for more than 12 months and those who have not yet reached that threshold. This is to allow the valuation to account for the different experience between short term and long term claimants.

1.3.2 Incapacity payments have evidenced an upward trend since 2000, as shown in Figure 1.1. Outlays for incapacity during 2021–22 reached $440.0m[1] compared with $395.5m in 2020–21.

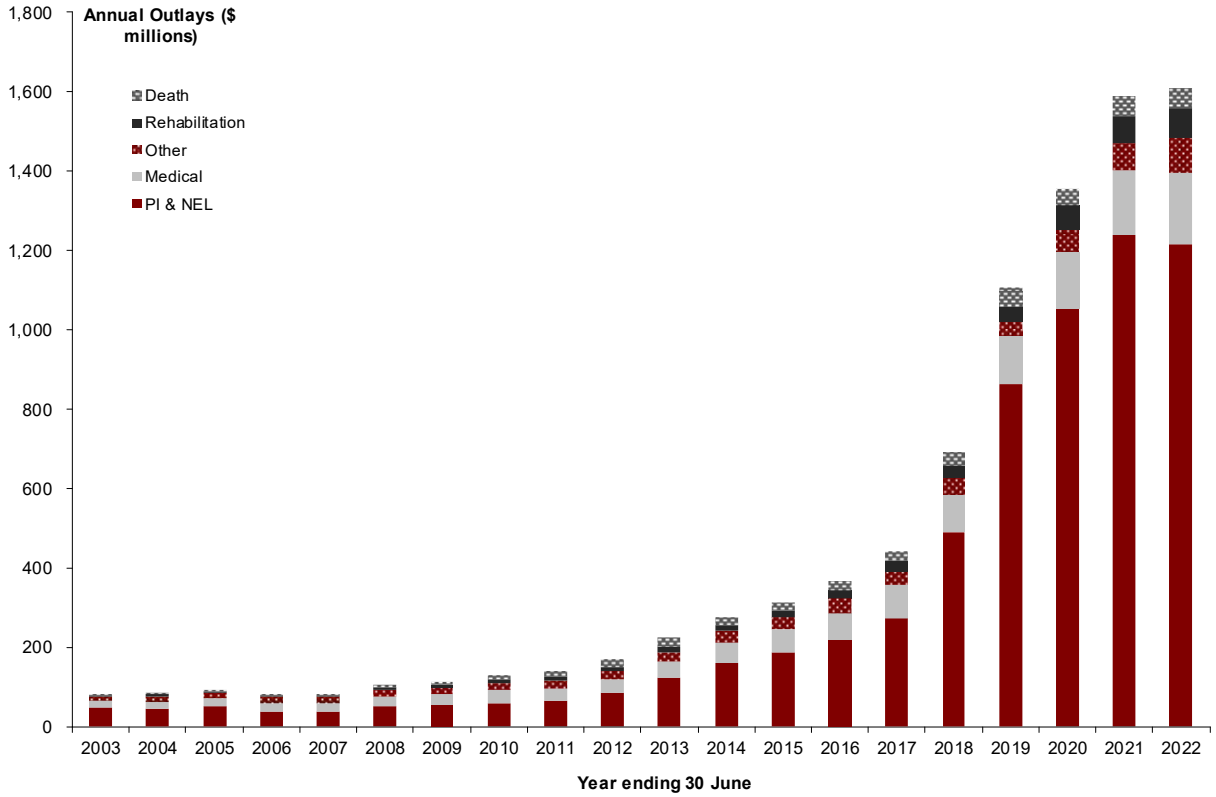
1 Outlays figures have been taken from the unit record data used for analysis. They may differ from DVA aggregate figures.

Figure 1.1: Recent payment experience – fortnightly incapacity payments (DRCA and MRCA combined)



1.3.3 The growth in expenditure for non-incapacity payments has been rapid in recent years, as can be seen from Figure 1.2 below. Permanent impairment payments, in particular, have increased substantially from year to year and, over the last decade, may have been affected by ADF operational activity, transitional issues associated with the introduction of MRCA, and the introduction of Veteran Centric Reform. Although expenditure growth in recent years has slowed, this has largely been driven by processing limitations within DVA rather than an actual slowing of experience.

Figure 1.2: Recent payment experience – non-incapacity payments (DRCA and MRCA combined)



1.3.4 The following tables compare actual payments over the last year with the amounts projected in the 2021 valuation. In total, actual payments were similar to those projected. The largest difference, in dollar terms, was for permanent impairment where outlays were $53.4m higher than projected.

Table 1.1: Comparison of actual and projected payments for 2021–22

Category	Projected $m	Actual $m	Difference $m	*% Difference*
Incapacity	404.3	395.0	(9.3)	*(2.3%)*
PI and NEL	1,162.5	1,215.9	53.4	*4.6%*
Medical	182.4	179.4	(3.0)	*(1.6%)*
Rehabilitation	71.6	73.1	1.4	*2.0%*
Death	47.3	49.8	2.5	*5.2%*
Other	75.6	90.5	14.8	*19.6%*
Total	***1,943.8***	***2,003.6***	***59.8***	***3.1%***

1.3.5 Additional comparisons by claim numbers and average size for benefit categories are included in the Appendix.

1.3.6 Over the last few years, processing constraints within DVA have led to growing numbers of claims on hand across both initial liability and permanent impairment claims. At the previous valuation, we made an allowance for these open claims based on historic transition trends

between initial liability and PI payments. We also adjusted cashflows based on advice from DVA on the expected uplift in administrative personnel over the short term. As a result, our projected expenditure was similar to the actual expenditure for the 2021 financial year.

1.3.7 The additional data received to December 2022 showed recent lodgement levels continue to be above completed claims across both DRCA and MRCA. Figures 1.3 and 1.4 below show the numbers of lodged and completed initial liability claims by unique claimants and financial year.

Figure 1.3: Lodged and completed initial liability – DRCA

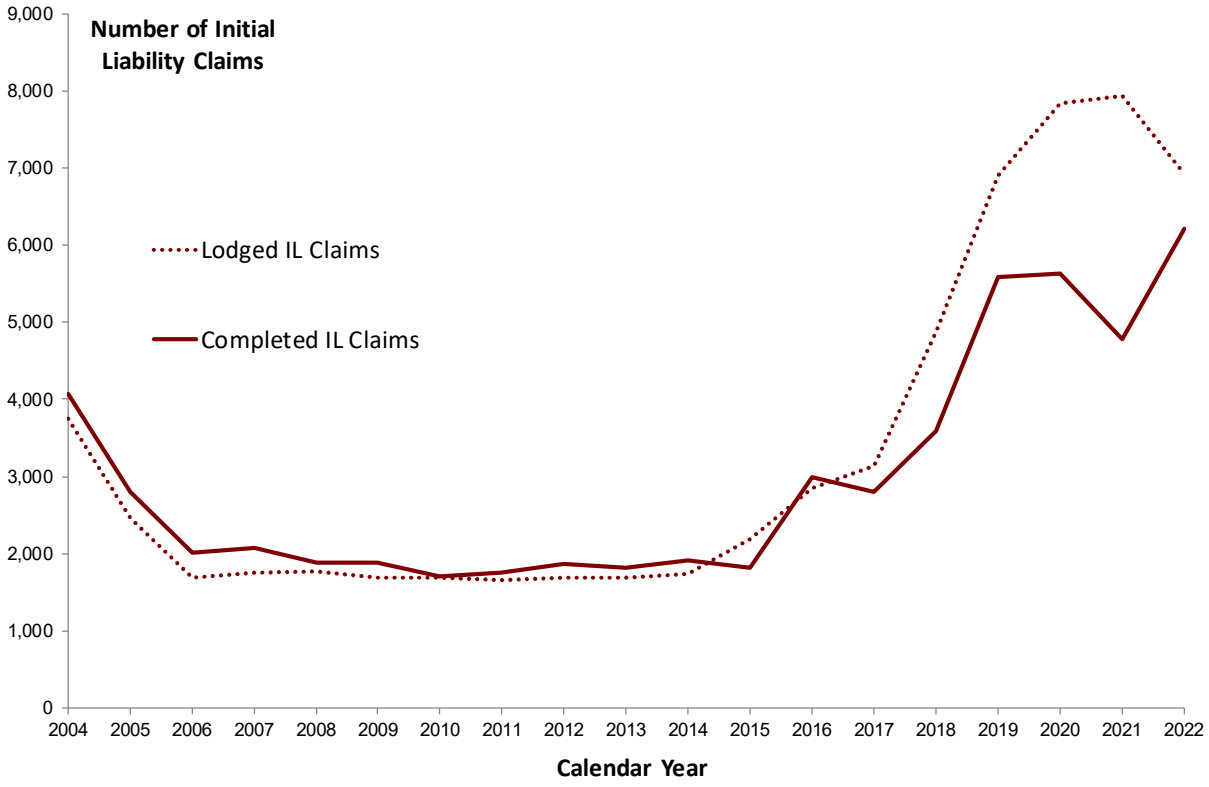
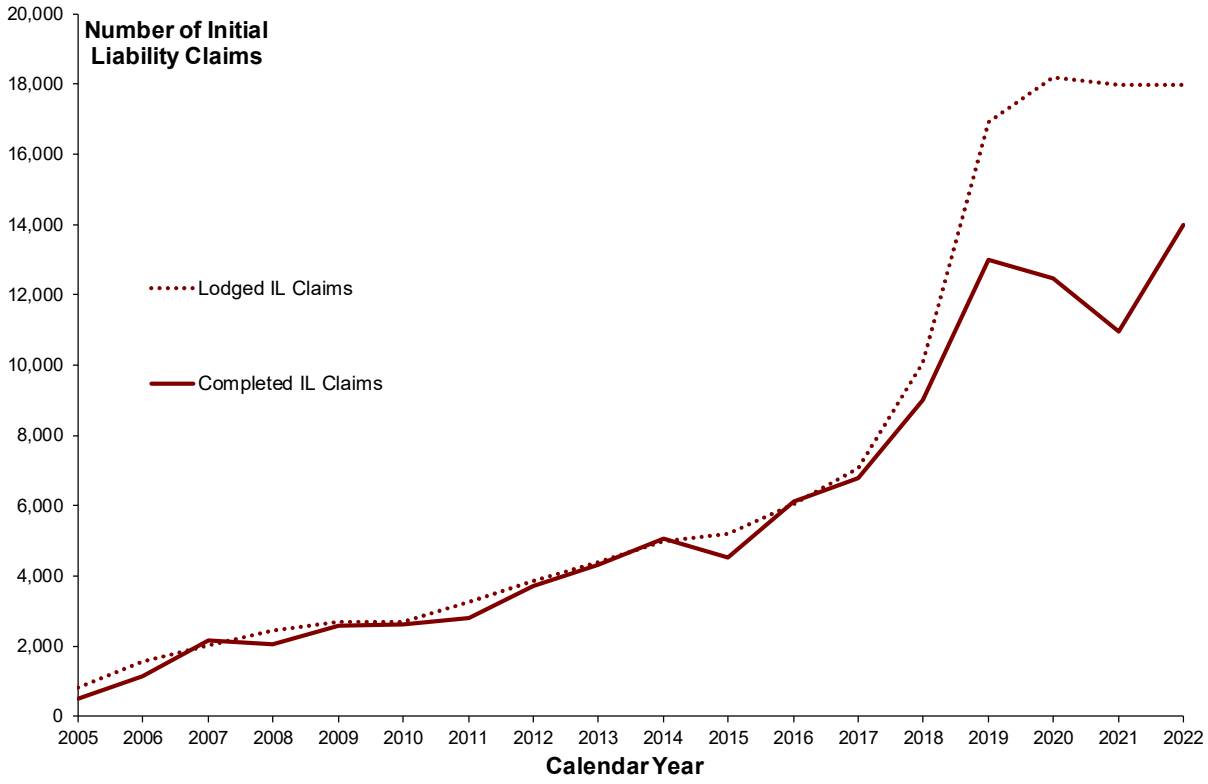


Figure 1.4: Lodged and completed initial liability – MRCA



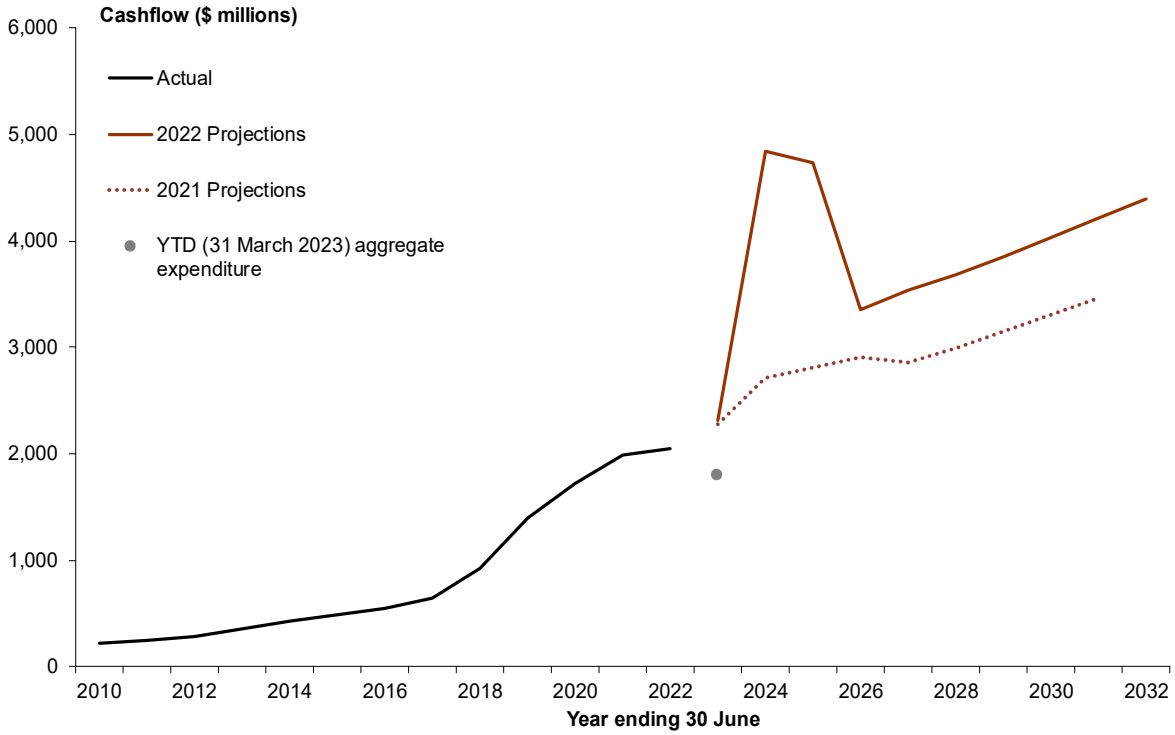
1.3.8 At this valuation, we have reassessed our claims backlog provision. The level of lodgements, particularly in MRCA, appears to be reaching a relatively stable state, where approximately 18,000 claimants have lodged an initial liability with DVA each year for the last 3 years. As such, we have used the most recent experience to project the expected number of initial liability claimants over the long term. To this, we have applied observed transition rates to all the major benefit types to determine an ultimate claims rate in the absence of processing constraints. At this year's valuation, we have also explicitly accounted for the existing number of open initial liability claims by using observed transition rates to account for their impact on a number of the major benefit types such as PI, incapacity, and household services. A provision for the processing constraints is also accounted for in MRCA medical benefits by adjusting the level of claimants expected to emerge. This is discussed further in section 12 of the report.

1.3.9 As with the previous year, we have projected future cashflows over the short-term to be in line with expected administrative personnel increases from DVA's Demand Driven Funding Model (DDFM). We have relied on the DDFM as it is currently our best source of information for the Department's expected processing capacity over the short to medium term. However, there still remains uncertainty around the timing of when the current claims backlog will be cleared as this is subject to a number of factors including ongoing Departmental funding, training of ongoing staff, staff retention, and the level of incoming new claims.

1.4 Valuation Results

1.4.1 Figure 1.5 below shows the projected cashflows aggregated across all categories from the 2022 valuation compared to cashflows projected at the 2021 valuation. We have also included the year-to-date aggregate 2022–23 outlays to 31 March 2023 from the general ledger data.

Figure 1.5: Cashflow projection for DRCA and MRCA



1.4.2 The projected cashflows are significantly higher than those projected at the last valuation. The increase is driven by changes to the liability for permanent impairment, MRCA medical, and household services benefits. We have also attempted to factor in the speed of claims processing based on DVA's DDFM model. This has resulted in a stepped increase in outlays over the 2024–25 and 2025–26 financial years to process the number of existing open initial liability claims. This eventually subsides as processing is expected to keep pace with the level of lodged claims going forward.

1.4.3 In our projection, we have assumed the current level of initial liability lodgements will continue and over the long term, claims processing levels will keep pace. Should processing speeds or lodgement levels change in future, the cashflows will differ from expected. It is important to note that there is substantial uncertainty as to the timing and magnitude of these impacts as they are also partially subject to funding decisions that can be outside of DVA's control. However, the current speed of processing appears unsustainable if experience continues at its current pace.

1.4.4 Table 1.2 shows the estimates of the key cost indicators broken down by Service Arm.

Table 1.2: Valuation results

Overall Cost Estimates Shown by Service				
Service	**Outstanding Claims Liability $m**	**Notional Premium $m (% salaries[2])**		**Projected Cashflows $m**
Current Report				for 2022–23
Army	28,753.2	2,363.6	(76.7%)	1,572.9
Navy	6,984.1	574.9	(31.1%)	410.6
RAAF	5,869.8	487.4	(28.3%)	335.3
Total	**41,607.0**	**3,425.9**	**(51.5%)**	**2,318.9**
Previous Report				**for 2021–22**
Expected (30/6/2022)	*32,560.0*	*2,850.6*		*2,283.7*
Total	**30,236.4**	**2,735.7**	**(42.2%)**	**1,943.8**

1.4.5 The outstanding claims liability as at 30 June 2022 represents the estimated present value of future claim payments to be made in respect of injuries sustained prior to 30 June 2022. The split of liabilities between the DRCA and MRCA is detailed in section 19.

1.4.6 The notional premium represents the estimated cost of compensation for claims arising from service rendered during 2022–23. It is the amount which, if paid over the course of the 2022–23 financial year and invested to earn the valuation discount rate of 5 per cent per annum, would be expected to meet the future cost of these claims. The cashflows represent the amount projected to be paid in the 2022–23 financial year for claims attributable to any service prior to and including 2022–23. The final rows show the comparable figures from the previous valuation, that is, the expected figures as at 30 June 2022 and the reported results as at 30 June 2021. The changes to modelling approach and assumptions have resulted in a 28 per cent increase to the expected liability and 20 per cent increase to the expected notional premium.

1.5 Comments on Results

1.5.1 At the last review, we projected that the liability would grow to $32,560m by 30 June 2022. The current liability is $41,607m. This is $9,047m higher than expected and has been driven by increases to the liability of MRCA medical benefits, permanent impairment benefits, and household services benefits.

1.5.2 At this valuation, significant modelling changes were implemented for MRCA medical and household services benefits in response to recent experience. The modelling update for MRCA medical was made possible this year by the provision of additional de-identified cardholder data which enabled AGA to distinguish between White Card and Gold Card holders in the medical benefits population. The growing proportion of Gold Card holders under MRCA has been highlighted in previous reports as a potential source of future growth and at this valuation, the additional data allowed further analysis to be conducted on the differences in usage and average cost between Gold Card users and White Card users. The high transition rate to Gold Card was also a key finding in the new analysis and enabled more nuanced modelling of future usage trends in the MRCA medical model. This resulted in an increase to

2 Estimate of salaries and allowances for 2022-23 provided by the Department of Defence.

the MRCA medical liability from an expected liability of $12,481m to $13,627m. Further details are provided in section 12 of the report.

1.5.3 Although the most recent annual expenditure of $27m in household services is relatively small compared to the other benefit types, we have seen rapid growth over recent years. This led to further investigation at this year's valuation into the benefit type through speaking with DVA policy and program areas to gain a better understanding of how these benefits are administered and how they are being accessed by veterans. A new model was implemented following these discussions to better capture the level of new claimants accessing benefits each year and the continued use of benefits over time. This resulted in a significant increase to the expected liability across both DRCA and MRCA. The liability for Other increased from $1,216m expected from the 2021 valuation to $4,275m. Household services forms the majority of the payments under the Other category.

1.5.4 The third key driver of the increase in the liability this year was the average size of MRCA permanent impairment payments. Average size of payments remained relatively stable between 2018 and 2020. An increase was seen in the 2021 financial year for the first time which has persisted into 2022. We have been informed by DVA that this could be driven by the increased number of medically discharged veterans from Defence and the clearance of older backlog claims where higher numbers of initial liability injuries may have accumulated. The current level of medically discharged veterans appears to be persistent and as such, we have used the latest year of experience in setting the impairment distributions which inform the projection of future permanent impairment claims. We have also observed an increase in the amount of Section 80 benefits paid to severely injured veterans with dependants. We believe this is likely related to the increased impairments seen in the latest year which have led to the increase in average size. As such, we have also increased the ongoing allowance for Section 80 benefits under MRCA. Combined, these changes have led to an increase of approximately $2,100m to the MRCA permanent impairment liability.

1.5.5 One of the largest sources of uncertainty in the last 2 years has been in the level of initial liability claims lodged with DVA and the subsequent flow on impact into benefit payments. Past experience in the scheme shows a strong trend in claimants with accepted initial liability claims eventually moving on to a benefit claim. At this valuation, we have revised our adjustment for initial liability claims to capture the impact of the current level of lodgements going forward and to provide an explicit allowance for the existing number of open initial liability claims. This change has resulted in increases to the liability across a number of benefit types and details on the adjustments adopted are included in each individual benefit section of the report.

1.5.6 With the recent growth in experience and changes in claims behaviour, there remains a question as to what proportion of veterans will ultimately seek support from DVA and what the average cost of those benefits will be. The current data available to the AGA does not allow us to accurately form this view and additional information is required from Defence and DVA detailing the demographics of the veteran and serving population. However, within our current data constraints, we have attempted to estimate the population for MRCA. This has allowed us to gain a more holistic view of benefit utilisation amongst veterans which we have used to perform scenario analysis should ultimate usage and average payment levels differ to that expected. This is detailed in section 20 of this report.

1.5.7 Interpreting experience in an environment with rapidly changing experience has significant challenges. It is important to note that the estimates given in this report are actuarial central estimates. This means, in broad terms, that the estimates are just as likely to be too high as too low. However, the true liability cannot be known with certainty and the range of factors

which might impact on future claim numbers and sizes means that estimates presented here are subject to considerable uncertainty.

1.5.8 The very long term over which these liabilities will be paid out makes the results very sensitive to relatively small changes in assumptions. This is particularly the case for payments that are expected to persist over an extended period, such as medical expenses. As noted in previous reports, determining the extent to which we should set assumptions in response to the most recent experience requires considerable judgement. For the current valuation, we have, for the most part, set assumptions based on the most recent experience.

2 Background

2.1 The Military Compensation Scheme

2.1.1 Compensation for military personnel injured in the course of their duties is provided under 4 separate pieces of legislation:

- the *Military Rehabilitation and Compensation Act 2004* (MRCA);
- the *Safety, Rehabilitation and Compensation (Defence-related Claims) Act 1988* (DRCA);
- the *Veterans' Entitlements Act 1986* (VEA); and
- the *Defence Act 1903*.

2.1.2 MRCA provides rehabilitation and compensation coverage for service with the Australian Defence Force on or after 1 July 2004.

2.1.3 DRCA provides similar rehabilitation and compensation to that provided under the MRCA, but only covers:

- injuries and diseases that arose from peacetime and peacekeeping service up to and including 30 June 2004; and
- operational service between 7 April 1994 and 30 June 2004.

2.1.4 Operational service prior to 7 April 1994 (which includes World War II, the Korean War and the Vietnam War) is not covered by DRCA. Operational service on or after 7 April 1994 gives rise to 'dual eligibility', that is, the option of applying for benefits under either or both the VEA and DRCA. This could be expected to affect the comparability of DRCA and MRCA experience.

2.1.5 This report is concerned only with liabilities arising from payments under the MRCA and the DRCA.

2.1.6 The MRCA included some differences in benefits relative to the DRCA. The most significant differences in terms of their impact on costs were:

- the introduction of a loading on incapacity payments to compensate for the loss of non-salary elements of ADF remuneration packages; and
- removal of the offset against incapacity payments for the member's superannuation contributions.

2.1.7 There have also been changes to the assessment processes and payment options for permanent impairment claims. In particular, the default permanent impairment entitlement was a periodic payment, with an option to convert this entitlement to a lump sum using age-based factors.

2.1.8 Since the introduction of MRCA in financial year 2005, there has been a review of military compensation arrangements which resulted in a change to the method of calculating transitional permanent impairment claims under MRCA. The estimated impact of this change is very small.

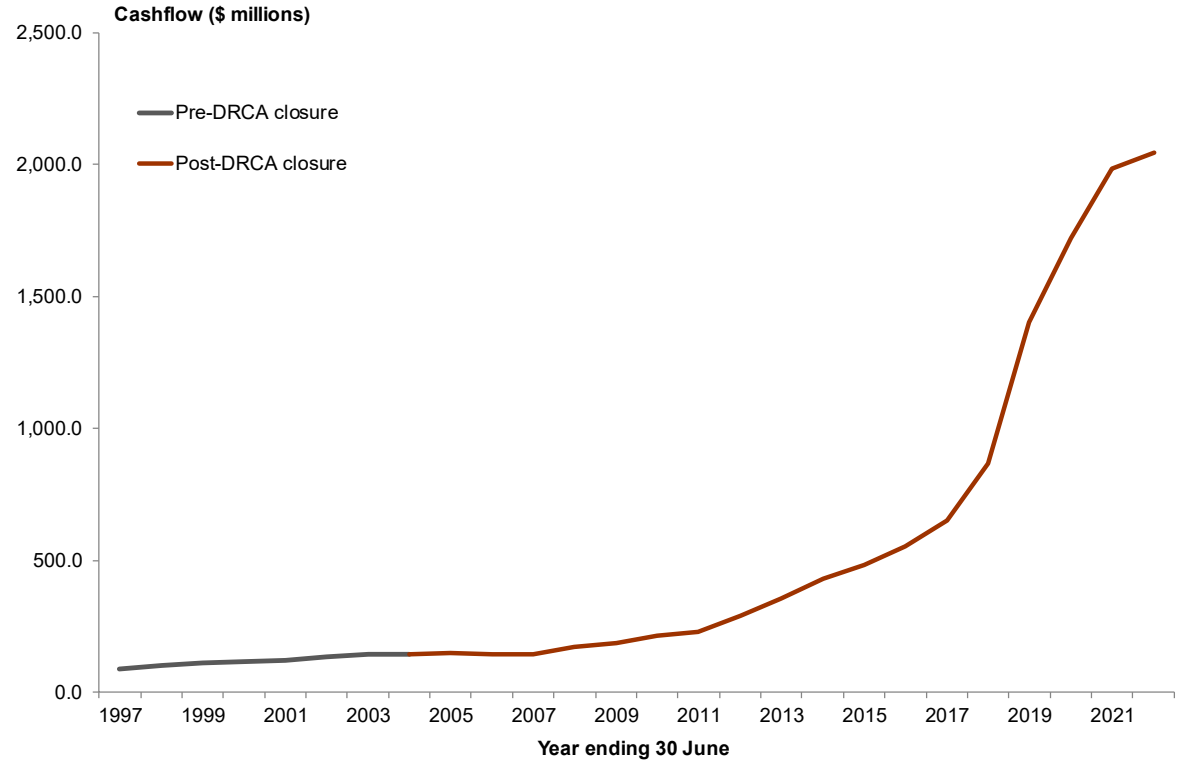
2.1.9 It should be noted that, in actuarial terms, MRCA is far from fully mature with experience limited to a maximum of 18 and a half years after the injury date. This compares with payment obligations that may continue for 60 or more years after the date of injury.

2.1.10 Furthermore, it has been apparent for some time that the early experience with MRCA has been affected both by data deficiencies and by the deferral of claims associated with the availability of deployment opportunities over most of the first decade following its introduction. In more recent years, the introduction of Veteran Centric Reform amongst other cultural and administration changes have seen experience shift dramatically from earlier periods. It may be some time before MRCA experience settles into a pattern that we can reasonably assume will provide a robust basis for projecting future claim behaviour. Nonetheless, given the differences between DRCA and MRCA experience that have become increasingly evident in the data, we are, as far as possible, relying on the MRCA data in setting assumptions for the MRCA scheme.

2.2 Trends in Expenditure

2.2.1 Figure 2.1 shows total outlays on the MCS since 1996–97. Prior to 2004, expenditure had grown at a steady but moderate pace, averaging around 5 per cent per annum. The introduction of MRCA from 1 July 2004 led to a significant disruption in experience with an initial drop in outlays followed by a return to growth. Experience from 2012 accelerated at a much higher rate than had been seen previously in the scheme. From 2012 to 2022, outlays increased at a rate of approximately 22 per cent per annum with the largest single increase of 62 per cent occurring between 2018 and 2019. Growth in expenditure over the last two years has slowed considerably, impacted by limitations in processing capacity which have resulted in backlogs of both initial liability claims and claims for permanent impairment benefits. Expenditure across DRCA and MRCA in the 2022 financial year was approximately $2.0bn, a slight increase from the 2021 experience.

Figure 2.1: Total cash outlays



2.2.2 There are a number of possible interpretations of this data. An earlier view was that the growth from 2011 to 2015 was, in part, compensating for the very low growth in the years after the introduction of MRCA. However, the more rapid increase in recent years challenges this view. Whilst there are differences in the benefits provided under MRCA, there have also been changes in the environment in which the schemes operate, including changing attitudes and modifications to DVA administrative practices. It now seems more likely that the most recent experience is part of the scheme's transition to a "new normal" that could be expected to persist indefinitely. This latter interpretation would imply that the behaviour of MRCA claimants is fundamentally different from that observed for DRCA claimants prior to the scheme's closure. This 'new normal' that we have seen in recent experience is still changing year on year and currently far from a stable, mature state.

2.2.3 Continued increases in recent experience have led us to believe that we are not dealing with a temporary anomaly but rather a genuine shift in experience that needs to be taken into account in setting valuation assumptions. The change from a regime where claims could be made under either the DRCA or the VEA to one where all claims must come through the MRCA is likely to be playing some part, but so is the introduction of the single claim process, the availability of online claim facilities and the increasing involvement of ex-service organisations and advocates in supporting veterans' claims under DRCA and MRCA. However, it is also not unreasonable to assume that these recent initiatives may have resulted in veterans approaching DVA earlier than they otherwise would have and experience over the long term could vary again from the experience observed in recent years. As such, there remains considerable uncertainty when interpreting recent experience for long term future projections.

2.3 History of Actuarial Reviews

2.3.1 The first actuarial review of the MCS was undertaken in 1996 with a valuation date of 30 June 1995. This was a joint project between AGA and Trowbridge Consulting (now Finity).

2.3.2 There was no valuation as at 30 June 1996, but from 1997 to 2005 AGA conducted annual reviews of the liability in relation to entitlements under the DRCA. In 2006, problems in obtaining reliable data on MRCA claims led to a decision to defer the valuation for a year in the expectation that data deficiencies would be able to be resolved. These issues were not fully resolved by 2007. In 2008 it was again decided to defer a full valuation to 2009.

2.3.3 The early reviews were hampered by a lack of historical data suitable for actuarial analysis, as well as difficulties in matching the data between different systems and incomplete records. This was not surprising since the information systems maintained by Defence (which was then administering the MCS) were designed around client service requirements rather than analysis needs. Since that time, there have been substantial improvements in the DRCA data to the point that we have no significant concerns around data volume or quality for DRCA claims.

2.3.4 The 2009 review was the first to draw on some of the MRCA non-incapacity data in setting MRCA assumptions. Data on medical and 'other' transactions became available for MRCA for the first time in 2010 and allowed MRCA data to be used in setting the assumptions for all heads of damage for the early development years.

2.3.5 Issues around the possible deferral of MRCA claims caused us to re-examine our reliance on MRCA data in setting assumptions on claim numbers and our 2014 report, and to a lesser extent the 2015 report, instead looked back at the DRCA experience immediately prior to 2004 in setting these assumptions. For the 2016 report, we reached the view that there was sufficient MRCA data to conclude that the pre-closure DRCA experience is not a reliable guide to MRCA outcomes. We therefore relied on MRCA experience for the development years where it was available in setting MRCA assumptions. This was a significant change in approach and one which had a major impact on the estimate of the liability in 2016. We have continued with this approach for all subsequent reports.

2.3.6 Table 2.1 shows the liability reported in each of the reviews to date. Note that these figures are all in nominal dollars and part of the increase is attributable to inflation and a change to the long term discount rate in the 2017 valuation from 6 per cent to 5 per cent.

Table 2.1: Estimated liability 1995 to 2022

Valuation as at 30 June	Liability Estimate ($m)	Change since Previous Review (% per annum)
1995	575.7	-
1996	-	-
1997	727.5	12.4%
1998	922.8	26.8%
1999	985.1	6.8%
2000	1,106.8	12.4%
2001	1,196.3	8.1%
2002	1,342.4	12.2%
2003	1,463.6	9.0%
2004	1,751.6	19.7%
2005	1,776.7	1.4%
2006	-	-
2007	1,813.4	1.0%
2008	-	-
2009	2,316.3	13.0%
2010	2,908.9	25.6%
2011	3,117.6	7.2%
2012	3,798.1	21.8%
2013	4,491.3	18.3%
2014	5,356.2	19.3%
2015	5,840.7	9.0%
2016	7,362.6	26.1%
2017	9,864.1	34.0%
2018	14,426.8	46.3%
2019	19,689.1	36.5%
2020	26,563.1	34.9%
2021	30,236.4	13.8%
2022	41,607.0	37.6%

2.3.7 There was substantial uncertainty around the results of the early reviews because of the very limited experience data available and the problems with data quality. For a number of benefits, there also appeared to be a change in the underlying behaviour over the same period. Over the period from 2004 to 2007, the increases in the liability were less than anticipated and, indeed, lower than the inflation rate. In retrospect, it seems likely that claims were artificially depressed over that period both by the introduction of the MRCA and by the higher operational tempo under which the ADF were operating.

2.3.8 Since 2009, the changes made to some of the modelling methodologies and assumptions in response to the experience illustrated in Figure 2.1 have led to significant increases in the liability year on year.

2.3.9 Cashflows under the MCS extend over a very long period for most benefits. As such, there is unavoidable uncertainty associated with the assumptions made. In these circumstances, we could expect to see continuing volatility in the estimate of the liability as experience unfolds. This is particularly the case for MRCA, but the recent DRCA experience highlights the potential for quite sudden and significant change even with a mature scheme. Note that, while there have been changes in ADF numbers that impact on the size of the population that can potentially make a claim, these movements tend to be less important in driving liability estimates than changes in claim behaviour and benefit parameters.

2.4 Scope of the Project

2.4.1 The objectives of the project were to:

- estimate the outstanding claims under the DRCA and MRCA (including claims incurred but not reported) as at 30 June 2022;
- project the outstanding claims liability under the DRCA and MRCA for the following 10 years;
- estimate the cash flow for benefit payments over the same period; and
- calculate the annual notional premium required to fully fund the estimated claims liability arising from service rendered in 2022–23.

2.4.2 Liabilities are split between run-off liabilities under the DRCA and liabilities under the MRCA and we have projected the liabilities and cashflows under each Act. Note that some expenditure related claims made under the DRCA will be met under MRCA appropriations due to the arrangements applying to health care cards. Specifically, clients with an accepted claim under both schemes will be issued with a MRCA health care card and all expenditure arising from use of the card will be MRCA expenditure. Going forward, this could be expected to reduce DRCA liabilities, with a compensating increase in MRCA liabilities.

2.4.3 This report does not consider liabilities arising from common law actions against the Department of Defence. Any awards made as a result of these actions will be funded by the Department of Defence outside the MCS.

2.4.4 This report has been prepared for the purpose of advising Government of the nature and quantum of its liabilities in respect of compensation for military personnel injured in the course of duty. It is also intended to comply with the requirements of the Actuaries Institute's Professional Standard 302 (PS302) which deals with actuarial reports and advice on general insurance technical liabilities where appropriate.

2.4.5 This report also forms the basis for our separate advice to DVA on reporting for financial statement purposes for the year following the valuation date. For that advice, adjustments are made to the results presented here to allow for the use of a discount rate which is considered to comply with the relevant Australian Accounting Standard (AASB 137).

2.4.6 Any proposed use of this report, in whole or in part, which goes beyond its stated purpose should be discussed first with AGA.

3 The Military Compensation Environment

3.1 Operational Environment

3.1.1 There are 4 characteristics of the MCS that distinguish it from other workers' compensation schemes:

- the risks faced by ADF personnel will depend upon external factors, most notably the Government's national and international security policies;
- the unique nature of military service which involves an unavoidable exposure to high levels of risk;
- the absence of any limit on the period in which a claim must be made; and
- the unlimited support provided under some benefits, most notably medical services.

3.1.2 Each of these features introduces significant uncertainty into any estimate of future costs.

3.1.3 One factor that is likely to have influenced recent experience is the relatively high level of deployments on warlike operations.

3.1.4 When ADF units were deployed in East Timor in 1999, it marked the start of a period of relatively intense activity for the ADF, which subsequently saw forces deployed in Iraq, Afghanistan and the Solomon Islands. Overall, more than 50,000 people have been deployed on warlike/non-warlike service over the period. This may have created a large pool of people who may have a higher probability of making a successful claim and, where they do make a claim, may be eligible for higher benefits.

3.1.5 The availability of deployment opportunities has almost certainly altered the pattern of discharges over the two decades. Both DVA and Defence have advised that discharge rates fall when there are opportunities for deployment. This is because there is both a very strong financial incentive (in the form of substantial tax-free allowances) and because it is an opportunity for Defence personnel to make use of their training.

3.1.6 Many claims for injuries, which are not sufficiently severe to warrant an immediate discharge on medical grounds, are made at the time of exit from the forces. Considering potential claims for compensation is part of the process of a normal discharge. As a result, when discharge rates increase, as has happened following the end of deployment opportunities, a higher number of claims would be expected to emerge, reflecting those who have deferred their exit. We think it is likely that deployments affected the claim rates in the early years of operation of MRCA and may be continuing to have some effect on the experience.

3.1.7 We currently do not have access to Defence data which could provide more detailed information regarding the magnitude of the exposure. For example, records related to incidents while in service, service length, deployments, and separation date might provide further insight into the total number of veterans expected to emerge in future and what proportion of these veterans have already claimed for DVA support.

3.1.8 Exposure to hazards that may not have been recognised as dangerous at the time is a further factor in the operational environment. Asbestos is an obvious example that has impacted on

DRCA expenditure. It is possible that currently unrecognised hazards will be identified in future and give rise to claims.

3.1.9 Changes in ADF recruitment can also play a part in the observed pattern of claims. Peaks in enlistments, for example, would be expected to lead to a corresponding jump in discharges, and associated claims. The planned expansion to the ADF announced in March 2022, is likely to have an impact on the quantum of liabilities going forward.

3.1.10 More recently, we have been informed of higher numbers of medically discharged veterans by DVA Data and Insights. Figures provided by DVA show a significant increase in the number of medically discharged veterans from 2020 onwards compared to previous years. Experience to 2022 suggests that this trend could continue into the future. Medically discharged veterans are more likely to have higher numbers and severity of injuries than other separating ADF personnel and could have led to some of the experience changes seen in the most recent MRCA permanent impairment data. This is discussed further in section 10 of the report.

3.2 Administrative Environment

3.2.1 A second factor which is likely to have played an important role in changing claim behaviour is the administrative environment. The closure of DRCA (and the VEA) for injuries incurred after 1 July 2004 is the most obvious change. It seems clear from the data that the early experience for MRCA was affected by delays as both claimants and DVA adjusted to the introduction of a new scheme. The interaction between entitlements under the DRCA and the VEA which existed prior to the introduction of MRCA could also be expected to impact on the claim experience.

3.2.2 More recently, there have been significant changes in the approach taken by Defence and DVA to manage claims. For example, DVA now has advisers on base to assist personnel in making claims. Defence now liaises more closely with DVA to ensure that there is continuity of treatment on separation from the ADF. The introduction of health care cards for DRCA claimants with long-term treatment needs in 2013 may also have changed the incentives to make a claim under DRCA.

3.2.3 The introduction of an online claim facility in 2015 has almost certainly impacted on the volume of claims received, while the single claim process is likely to have affected the mix of VEA, DRCA and MRCA claims. The initiatives around non-liability healthcare, while not directly impacting on DRCA or MRCA expenditure, are likely to have increased the level of contact between veterans and DVA and might, in due course, result in increased liability claims.

3.2.4 Legal decisions can also have an impact on claim numbers and amounts. There have been 3 decisions over the last 15 years that appear to have generated a surge in DRCA permanent impairment payments:

- the 2006 High Court decision in Canute which found that in assessing the degree of permanent impairment when more than one injury is present, a separate assessment must be made for each injury that results in permanent impairment;
- the 2009 High Court decision in Fellowes which reinforced the Canute decision and established that separate injuries which result in separate impairments must be independently assessed; and
- the 2013 decision by the Full Federal Court in Robson which reiterated that separate injuries and their associated impairments must be assessed separately and in isolation, even if they relate to the same body part or if there is a causal relationship between the 2 injuries.

4 Data Used for the Valuation

4.1 Data Sources

4.1.1 An actuarial investigation of the experience of a compensation scheme relies on the capacity to analyse the available information about the scheme. The more reliable and comprehensive the data, the greater the confidence that can be placed in the models developed from that data.

4.1.2 For the MCS, incapacity payments and fortnightly payments to dependent children prior to 1 July 2017 came from the PMKEYS system and all other DRCA payments, apart from healthcare card data which are handled under the TAS system, are processed through the DOLARS system. Individual claims data prior to 1 July 2017 which provides details on the demographic characteristics of DRCA claimants and the nature and timing of the injury giving rise to the claim was held on the DEFCARE system.

4.1.3 There were changes in the administrative systems as a result of the introduction of MRCA which have impacted on the data provided to AGA. As has been noted in previous reports, a new claims database (CADET) was developed but took some time to be fully implemented. As a result, there is a permanent gap in the MRCA claims information covering the first 2 years after the introduction of the scheme.

4.1.4 MRCA data is stored and processed through various systems including PMKEYS for incapacity payments prior to 1 July 2017, DOLARS for some general and medical payments, and IPS for other payments including permanent impairment entitlements. Many of the MRCA payments for medical and other services which are provided to those holding a repatriation health care card are processed through Medicare Australia.

4.1.5 From 1 July 2017, the ISH system was implemented by DVA for both DRCA and MRCA claims and payments. Data received from 1 July 2017 to 31 December 2022 is a combination of extracts from legacy systems and ISH.

4.2 Data Provided

4.2.1 We were provided with unit record payment data which covered the period to 31 December 2022. The data for the 2021–22 financial year was checked and reconciled as far as possible against aggregate data sources. We have incorporated unit record payments data up to 31 December 2022 into the analysis for all heads of damage.

4.2.2 At the previous valuation, there was a change in the recorded unique IDs in the unit record data. This has continued for the most recent data extract. As in the previous year, we do not believe this has posed a material issue at this valuation.

4.2.3 In addition to the unit record data extract, DVA also provided de-identified data for medical card holders and a payments extract relating to arrears payments for the incapacity benefit type.

4.2.4 We also received aggregate payment data up to the third quarter of 2022–23. Aggregate data can be distorted by timing issues and advances which are paid to other agencies. As a result it cannot be treated as totally reliable.

DRCA

4.2.5 The unit record data provided payments which covered the period from 2005 to 31 December 2022 for incapacity payments and from 2001 to 31 December 2022 for non-incapacity benefits. We have relied primarily on unit record data over the most recent calendar years to 31 December 2022 to set assumptions in the DRCA valuation.

4.2.6 For this review, as with previous reviews, it has been necessary to match payment data to claims records. A portion of the unit record data from 1 July 2017 to 31 December 2022 came from a new payment system, ISH, which was implemented by DVA during the 2017–18 year. This changed the recording of DRCA payments to be in line with MRCA payments i.e. payments are recorded against a claimant rather than an injury. We have retained our valuation methodology in line with the current methodology used for MRCA to account for this change.

4.2.7 Our two main points of validating or assessing the suitability of the data for valuation purposes are that we are able to match a very large proportion of payment and claim records and that the aggregates calculated from the unit record files are consistent with the aggregate expenditure data provided by DVA. For the most part, the DRCA data satisfied both of these conditions.

4.2.8 For DRCA incapacity, the total aggregate figure appears to be a net outlay amount and not the gross payment DVA made during the year. We have discussed this issue with DVA and believe the discrepancy is due to debt repayments made by clients which are not recorded at the unit record level. As such, we have continued to use the unit record data to set assumptions for the projection but have made an adjustment to account for these debt repayments. This is discussed in further detail in sections 6 and 7.

MRCA

4.2.9 The unit record data provided payments for the period from 1 July 2004 when the MRCA scheme began to 31 December 2022. MRCA data was problematic in the early years; reliable data is not available and is unlikely to ever become available in relation to the first 18 months of operation of the scheme.

4.2.10 For all MRCA payments, including the health care card data, the transaction data was keyed by claimant rather than claim. This made it impossible to match payments to a particular injury if a claimant had more than one claim. The approach we have taken to dealing with this constraint for modelling medical liabilities is discussed in section 11.2.1.

4.2.11 A small discrepancy in the allocation of MRCA medical nominals was found during the analysis this year. On advice from DVA, we have removed nominals 65500 and 65600 from the MRCA medical benefit category to MRCA medico-legal payments. Although these have payment descriptions related to medical services, further investigation from DVA showed that a significant number of the transactions recorded against these nominals were related to medical reports used in the claims process.

4.2.12 In general, the quality of MRCA data has improved over recent years. In 2021–22 we were able to match a high proportion of records.

4.3 Data Quality

4.3.1 Most DRCA payment transaction records include the relevant DEFCARE claim identifier which, in most cases, allows payments to be linked back to the original injury. This is important since, for the MCS, compensation claim payments are often made many years after the occurrence of the injury and estimation of the outstanding liability requires an assessment of the amount and timing of future payments in relation to past injuries. However, this changed from 1 July 2017 with the introduction of the ISH system where payments are now recorded against unique claimants.

Table 4.1: DRCA data

2019 20 Financial Year				
Usage	**DVA Aggregate ($m)**	**Sum of Transactions ($m)**	**Amount Matched ($m)**	**Proportion Matched (%)**
Incapacity	89.5	110.9	110.9	100
Permanent Impairment	170.0	169.6	169.6	100
Medical	14.0	13.8	13.8	100
Rehabilitation	12.1	12.1	12.0	100
Death	25.7	25.7	25.2	98
Other	18.7	20.0	17.2	86
Total	**330.1**	**352.2**	**348.7**	**99**

2020 21 Financial Year				
Usage	**DVA Aggregate ($m)**	**Sum of Transactions ($m)**	**Amount Matched ($m)**	**Proportion Matched (%)**
Incapacity	86.7	123.1	119.4	97
Permanent Impairment	260.4	259.6	259.0	100
Medical	8.4	8.7	8.2	95
Rehabilitation	12.0	12.0	11.9	99
Death	30.3	30.3	30.3	100
Other	24.0	24.0	20.3	85
Total	**421.7**	**457.7**	**449.0**	**99**

2021 22 Financial Year				
Usage	**DVA Aggregate ($m)**	**Sum of Transactions ($m)**	**Amount Matched ($m)**	**Proportion Matched (%)**
Incapacity	86.1	130.8	130.8	100
Permanent Impairment	205.3	205.8	205.7	100
Medical	7.8	8.1	6.4	79
Rehabilitation	11.8	12.6	12	95
Death	28.5	28.8	28.5	99
Other	28.4	28.5	26.5	93
Total	**368.0**	**414.6**	**410.0**	**99**

4.3.2 We consider that the DRCA data is suitable for the purposes of setting the assumptions for this review.

4.3.3 Table 4.2 shows the equivalent information for the MRCA data over the 3 years.

Table 4.2: MRCA data

2019 20 Financial Year				
Usage	**DVA Aggregate ($m)**	**Sum of Transactions ($m)**	**Amount Matched ($m)**	**Proportion Matched (%)**
Incapacity	251.4	250.2	250.2	100
Permanent Impairment	919.1	884.7	884.6	100
Medical	134.6	127.6	127.6	100
Rehabilitation	51.2	51.5	43.4	84
Death	14.7	15.3	15.2	100
Other	24.5	35.9	34.6	96
Total	**1,144.0**	**1,115.0**	**1,105.6**	**99**

2020 21 Financial Year				
Usage	**DVA Aggregate ($m)**	**Sum of Transactions ($m)**	**Amount Matched ($m)**	**Proportion Matched (%)**
Incapacity	272.4	272.4	272.7	100
Permanent Impairment	963.3	981.0	981.0	100
Medical	155.7	154.1	151.8	99
Rehabilitation	55.8	55.9	49.8	89
Death	20.1	19.7	19.5	99
Other	43.9	43.7	43.7	100
Total	**1,511.1**	**1,526.8**	**1,518.6**	**99**

2021 22 Financial Year				
Usage	**DVA Aggregate ($m)**	**Sum of Transactions ($m)**	**Amount Matched ($m)**	**Proportion Matched (%)**
Incapacity	308.7	308.9	308.8	100
Permanent Impairment	999.7	1,010.2	1,010.2	100
Medical	171.6	168.5	151.8	90
Rehabilitation	58.7	60,4	57.5	95
Death	20.6	21.3	21.3	100
Other	61.7	64.7	55.2	85
Total	**1,621.0**	**1,634.0**	**1,604.8**	**98**

4.3.4 As we have noted previously, the MRCA payment records do not include a claim identifier. This means that it was not possible to match expenditure to a particular injury but only to an individual. Bearing this limitation in mind, the quality of the MRCA data has generally improved over recent years. As shown in Table 4.2, we were able to match the majority of records to a claimant.

4.3.5 Overall, we are satisfied that the MRCA data is suitable for analysis.

5 Valuation Approach

5.1 Projection Models

5.1.1 The actuarial valuation process relies on projecting future payments and then discounting them back to a present value. The method adopted to generate these projections varies between the different types of payments.

5.1.2 The models used for the current valuation can be classified into 4 groups:

- composite run-off models combining projections of usage and average cost;
- cohort projection models;
- simulation models; and
- annuity models.

5.1.3 The composite run-off models adopt an assumption of the numbers of claimants by accident year exposure to project future claim or claimant populations and then apply a cost per claim or claimant to estimate expenditure. The concept of unit of exposure is integral to this approach. In this context, a unit of exposure represents 10,000 equivalent full-time ADF personnel (calculated as sum of the number of permanent ADF personnel and 15 per cent of the number of reservists). This takes account of changing ADF numbers in terms of the potential population that might give rise to a claim. For example, in the 1960s, there were close to 90,000 equivalent full-time personnel, while, since 2000, numbers have typically ranged between 55,000 and 60,000.

5.1.4 In March 2022, the Government announced an increase to the Defence workforce, increasing the permanent ADF to approximately 80,000 by 2040. In light of this, we have increased our expected ADF personnel from 2022 onwards to linearly increase to an exposure of around 80,000 by 2040. We have increased the expected number of reservists proportionately. Although this increase does not impact on the liability, it does impact on the 10 years of future projected cashflows presented in this report.

5.1.5 The process of estimating the cost can be more or less sophisticated. For example, for permanent impairment, we look at the age distribution of claimants, the proportion of warlike and peacetime claims, and the distribution of impairment points, while for rehabilitation we use a simple average cost per claim.

5.1.6 A cohort projection model is used for the DRCA medical head of damage. This model projects the number of future active claimants based on the existing recipient population by applying a decay rate to the population currently using services. Note that this is not assuming that the same individuals are incurring costs in each year, rather that there is a relationship between the overall number of people receiving services from one year to the next.

5.1.7 Deterministic simulation models are used for the short-term and future long-term incapacity expenditure projections. These models apply probabilities of future payment receipt to a population at the level of the individual. A stochastic simulation model has been used to model the active MRCA medical population and household services population.

5.1.8 Annuity models are used for modelling expenditure at an individual level where we expect some stability in annual payments. This is most notably the case for existing long-term incapacity recipients and MRCA permanent impairment entitlements that are being paid as a periodic payment.

5.1.9 Death benefits typically represent a relatively small component of the non-incapacity liability; however the number of deaths in any given year can vary quite dramatically. This randomness tends to overwhelm the results and there is little to be gained from any detailed analysis of the data. The source of claims is, however, quite different for the two schemes, with DRCA claims largely arising from long latency conditions and MRCA claims tending to be linked to accidents. We have, therefore, looked at the DRCA and MRCA experience separately.

5.2 Payment Rates

5.2.1 The assumed payment structure depends upon the benefit being modelled. For annuity models, the current level of payment forms the basis of the model and rises in line with the assumed inflation structure. Duration based exit rates are used for current long-term incapacity recipients.

5.2.2 For incapacity recipients, the probability of achieving long-term status, exit rates from long term payment and assumed payment rates all depend upon age with the assumed age distribution of new claimants in turn depending upon the lag between the accident year and the commencement of the incapacity episode.

5.2.3 For DRCA permanent impairment, a single average payment per claim is used for the current valuation. For MRCA permanent impairment, the payment size is based on assumptions regarding the nature of service, gender, age at the time of the claim and a distribution of severity ratings in terms of assessed impairment points.

5.2.4 Modelling for MRCA medical payments allows for usage rates and payments per transaction to vary with age and type of card.

5.2.5 The number of paydays is incorporated into the cashflow projections where payments are made on a fortnightly basis.

5.3 Backlog Adjustment

5.3.1 Processing constraints have remained an issue at DVA over the last few years and has resulted in a backlog of lodged initial liability (IL) claims under both DRCA and MRCA.

5.3.2 Figure 5.1 and Figure 5.2 below show the level of lodged and completed IL claims under DRCA and MRCA to the end of calendar year 2022. Please note that the claims in the figures below have been counted as unique individuals with lodged or completed claims within the calendar year e.g. if a veteran has lodged multiple IL injuries within the year, they are only counted once in that year. This differs from the definitions used within DVA.

Figure 5.1: DRCA Lodged and Completed Initial Liability

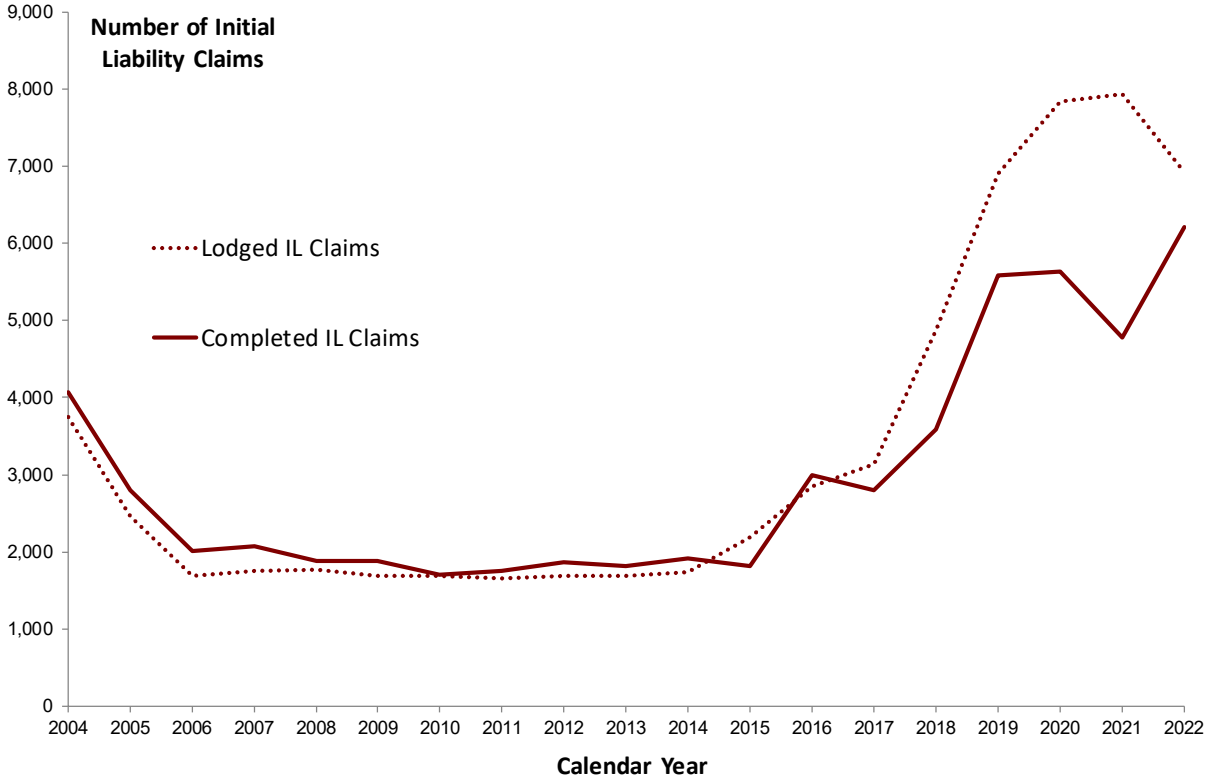
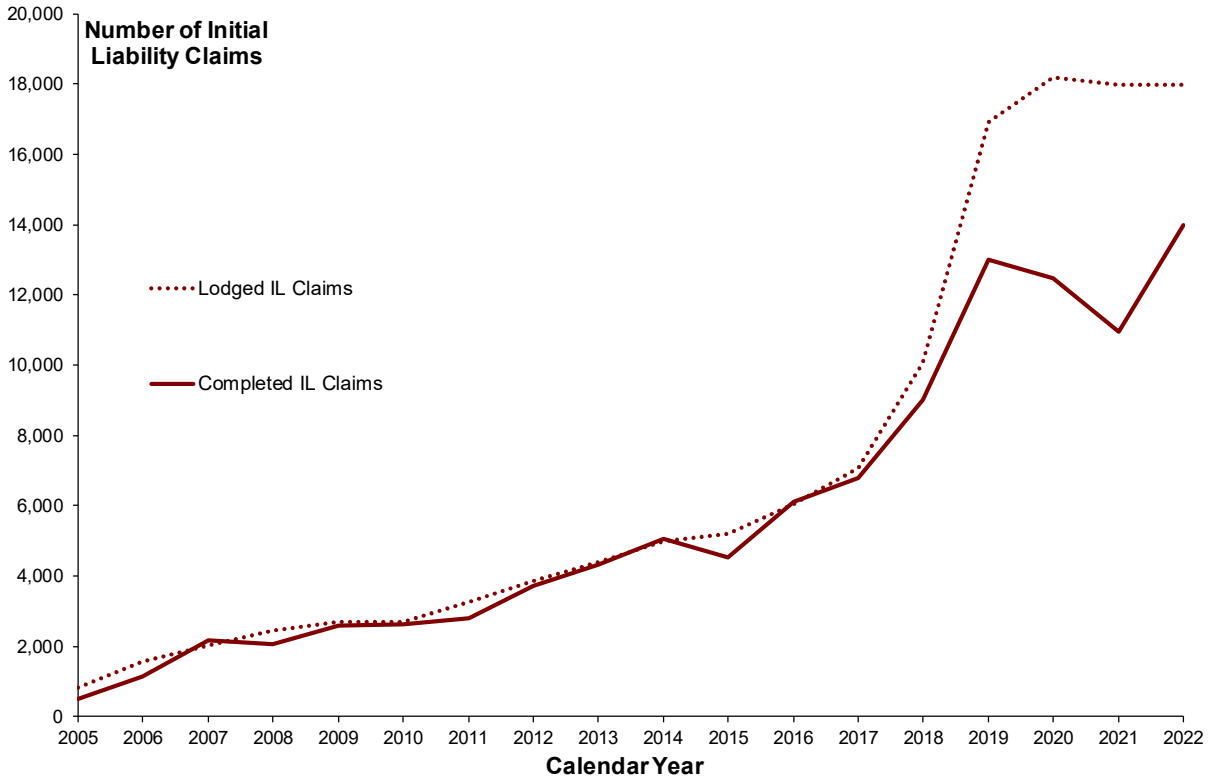


Figure 5.2: MRCA Lodged and Completed Initial Liability



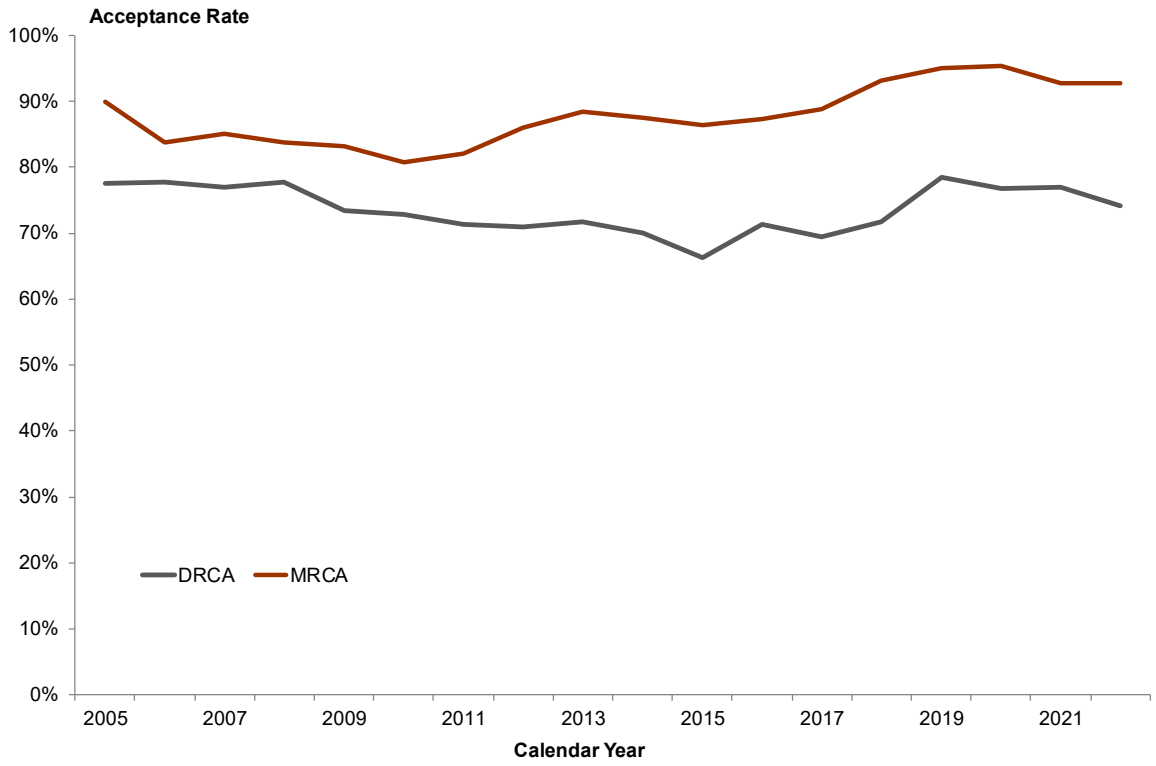
5.3.3 The valuation models adjust the observed payment experience across most benefit types to account for the impact of processing constraints at the initial liability stage. These require

assumptions relating to how current open claims will transition to a particular benefit and is based on transitions observed in historic data. These adjustments are discussed in detail under each benefit section.

5.3.4 Although each benefit type has its own observed transition rates from the IL claims, an assumption is first required to determine what proportion of the lodged IL claims will be accepted once they have been processed. This theoretical number of accepted IL claims forms the basis of each benefit adjustment.

5.3.5 Figure 5.3 below shows the historic acceptance rates for MRCA and DRCA IL claims.

Figure 5.3: DRCA and MRCA IL acceptance rates



5.3.6 The acceptance rates for IL claims have been relatively steady across both DRCA and MRCA in recent years. For the purpose of the backlog adjustment, acceptance rates of 75 per cent for DRCA and 93 per cent for MRCA have been adopted when calculating the accepted number of IL claims in the absence of a claims backlog. For MRCA, an allowance of 15 per cent is also included to account for historic withdrawal rates.

5.3.7 An additional adjustment is made to the resulting cashflows from the projection models for permanent impairment and incapacity benefits to account for the anticipated timing of the backlog clearance of initial liability claims. This adjustment has been made with reference to the DDFM which projects future administrative processing capacity. This is currently our best source for expected timing and has been used to shape the projected cashflows in line with the DDFM's processing expectations. All assumptions underlying the cashflows are our own.

5.4 Economic Assumptions

5.4.1 To project future cashflows, it is necessary to adopt assumptions regarding the rate of growth in nominal payments. A discount rate assumption is also required to arrive at a meaningful estimate of the present value of the outstanding liability.

5.4.2 Claim payments will tend to increase for many reasons. For example, incapacity payments are linked to earnings, the limits for PI and NEL lump sums are indexed to CPI and other benefits are subject to indexation as set out in the rules of the scheme.

5.4.3 However, policy initiatives, changes in the external environment or other less obvious influences could all be expected to impact the claims costs. Examples of such factors include:

- an altered approach to assessment (such as the move from using independent specialists to using the veteran's general practitioner to make medical assessments) or changing community norms around mental illness leading to a higher impairment rating;
- a policy decision to increasingly rely on health care cards rather than reimbursement arrangements for medical examinations; and
- impacts of the recent coronavirus pandemic on access to services and type of services offered.

5.4.4 These phenomena contribute to what is known as superimposed inflation in the cost of the scheme – that is, the extent to which the rate of growth in the overall cost of the scheme exceeds the rate of general inflation in the community.

5.4.5 In setting inflation assumptions, we have had regard to any statutory guidelines on indexation, tempered by the observed experience. The main area where this tempering occurs is in relation to DRCA permanent impairment.

5.4.6 The maximum DRCA PI payment for a single claim is indexed in line with CPI. All else being equal, therefore, we might expect the average payment to also increase in line with the CPI. In practice, the average payment has increased considerably faster than prices. Over the period from 2002 to 2022, the annual rate of growth has been approximately 6 per cent. DRCA PI saw rapid growth in the average size following Veteran Centric Reform between 2017 and 2019 where the annual rate of growth reached almost 20 per cent. Since 2019, the rate of growth has slowed, with the most recent period exhibiting an annual rate of growth of 4.2 per cent. As such, we have retained the inflation rate of 5 per cent adopted at the last valuation for DRCA PI.

5.4.7 MRCA PI and death payments are expected to increase in line with expected future CPI growth of 2.5 per cent. This is consistent with the legislated benefits. For service-related benefits such as medical treatment, rehabilitation, and household and attendant care services, we have used 3.7 per cent expected long term wage growth to index future payments. This compares to 4.0 per cent used at the previous valuation and reflects a change to expectations of long-term wage trends.

5.4.8 The following table summarises the combined nominal rate of inflation (that is, normal inflation plus superimposed inflation) used for the current valuation and the previous valuation. The rates shown for wage linked benefits are the long-term assumptions.

Table 5.1: Rates of inflation

Category	2022 Valuation	2021 Valuation
Incapacity payments	3.7%	4.0%
PI and NEL (DRCA)	5.0%	5.0%
PI (MRCA)	2.5%	2.5%
Medical	3.7%	4.0%
Rehabilitation (DRCA)	3.7%	4.0%
Rehabilitation (MRCA)	3.7%	4.0%
Death (DRCA)	3.7%	4.0%
Death (MRCA)	2.5%	2.5%
Other 1 – Medical service (DRCA)	3.7%	4.0%
Other 1 – Legal service (DRCA)	3.7%	4.0%
Other 1 (MRCA)	3.7%	4.0%
Other 2	3.7%	4.0%

5.4.9 The estimation process involves projecting the future claim payments allowing for normal inflation and superimposed inflation as described above. To calculate the liability, the payments are then discounted to a present value. This discounting recognises the time-value of money and enables the realistic assessment of long-term financial arrangements such as the MCS.

5.4.10 The Australian Accounting Standard (AASB 137) which would apply for financial reporting purposes specifies that the discount rate used in preparing estimates of claim liabilities should be a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. In an arrangement such as the MCS, this might be interpreted as the return on Commonwealth securities of appropriate durations and, for financial statement purposes, we use a yield curve derived from the yields on Commonwealth securities as at the relevant 30 June for discounting purposes.

5.4.11 Such an approach can lead to major changes in the estimate of the liability due solely to changes in interest rates. For the full actuarial review that we are reporting on here, we regard a stable interest rate assumption to be preferable as it allows other changes in experience, which are more important from a policy perspective, to be observed. We have retained the 5 per cent long term interest rate for discounting cashflows used at the previous valuation. The 5 per cent long term interest rate is consistent with the rate used to discount other long term Commonwealth liabilities, in particular, the cost of military superannuation benefits. This is based on long term expectations of 2.50 per cent CPI growth, 1.20 per cent productivity growth, and 1.25 per cent population growth.

5.4.12 Note that an additional letter of advice will be provided to DVA for financial statement purposes. This letter will include the result of the roll forward process which provides the liability as at 30 June 2023 and will discount cashflows using a yield curve derived from Commonwealth securities as described in 5.4.10.

5.5 Administrative Expenses

5.5.1 DVA reports administrative expenditure, including claims handling expenses for all claims under all 3 compensation Acts through separate systems. We currently have no data relating explicitly to claims handling expense for MRCA and DRCA claims available and have made

no explicit allowance for claims handling expenses in our valuation of MCS liabilities. Our understanding is that a separate provision for administrative expenses in relation to all Acts is made in DVA's internal budget projections.

5.6 Risk Margins and Risk Assessment

5.6.1 The estimates provided in this report represent our best estimates of the liability and projected cashflows. That is, it is intended to be equally likely that they are too low as that they are too high. We have not calculated a risk margin (prudential margin).

5.6.2 The relevant Accounting Standard for reporting the liability is AASB 137. This Standard does not explicitly require a risk margin to be included. It is also arguable that the inclusion of a risk margin would be inconsistent with the requirement set out in paragraphs 36 and 37 of AASB 137 that the estimate be based on the amount that the entity would rationally pay to settle the obligation. In the context of the Commonwealth's balance sheet, it can be argued that the Commonwealth would be irrational to pay more than the central estimate to settle the liability. The fact that the Commonwealth chooses to self-insure many of its risks rather than pay a premium to transfer them off the balance sheet adds support for this view.

5.6.3 However, the considerable uncertainty associated with the estimates should not be disregarded in considering the results. The true liability is unknown and the cashflow projections become increasingly uncertain the longer the projection period.

5.6.4 To help illustrate the uncertainty, we have included some sensitivity and scenario analysis around key assumptions in section 20. The analysis focuses on the largest benefit types, the key assumptions which contribute to the liability result, and areas of significant uncertainty.

5.7 Reinsurance and Non-Reinsurance Recoveries

5.7.1 DVA have no reinsurance contracts in place relating to MCS liabilities. As such, provisions have not been made for expected reinsurance recoveries.

5.7.2 Veterans can claim for benefits relating to the same injuries under the Military Superannuation system. In these circumstances, benefits can be offset between the MCS incapacity benefits and benefits received from superannuation. AGA has not been provided with data from DVA on offsetting arrangements from superannuation benefits. However, we have observed the impacts of these recoveries by comparing the aggregate DRCA incapacity payments from the general ledger to the unit record payments. This discrepancy has been discussed with DVA who have informed us that in the majority of cases, the difference has been due to superannuation offsets, most likely related to retrospective invalidity claims made under the superannuation schemes. We have made an allowance for future recoveries related to retrospective invalidity claims for DRCA incapacity. This is further discussed in section 6.2 of the report.

6 Valuing Short-Term Incapacity Payments

6.1 Modelling Approach

6.1.1 Incapacity payments are income replacement payments made fortnightly and at a level related to the recipient's salary prior to injury. Exit rates from incapacity payments decline rapidly with duration on benefits. We have therefore made a distinction between episodes that persist for more than 12 months, which are highly likely to continue for an extended period, and those that are completed within a 12-month period. Benefits paid after a recipient has been on benefits for more than 12 months are referred to as long-term payments, while short-term payments refer to benefits paid in the first 12 months of receipt.

6.1.2 As with the previous valuation, we have modelled the relationship between short-term and long-term recipients explicitly. That is, we have started with a projection of the number of short-term incapacity recipients and modelled the probability of an episode transitioning to long-term status to determine the expected number of future long-term recipients.

6.1.3 For modelling purposes, we have defined a long-term episode to be a period of more than 26 fortnights of continuous receipt of incapacity payments, noting that a period of up to 3 pay periods (or fortnights) without a payment is deemed not to interrupt an episode. A break of 4 pay periods or more terminates an episode, unless there is a lump sum payment that, when spread using the average payment received prior to the break, spans the gap. Following a termination, a further period of 26 fortnights in continuous receipt of payments is required to establish a new long-term episode.

6.1.4 Short-term payments are modelled by projecting numbers of recipients, average payment rates and probabilities for survival. Recipients who are modelled to stay on benefits for 12 months then become part of the projected long-term recipient population and are treated in the same way as existing long-term recipients (discussed further in section 7).

6.1.5 There are also lump sum incapacity payments that are made in addition to the normal fortnightly payments. Some of these payments are back-payments that fill in a gap in the fortnightly payments and, as noted above, we spread these and treat the episode as continuous. Other lump sum payments can be considered as additions to the normal fortnightly payments, and we make an adjustment to the projected cashflows for the periodic payments for both short-term and long-term recipients to allow for these amounts.

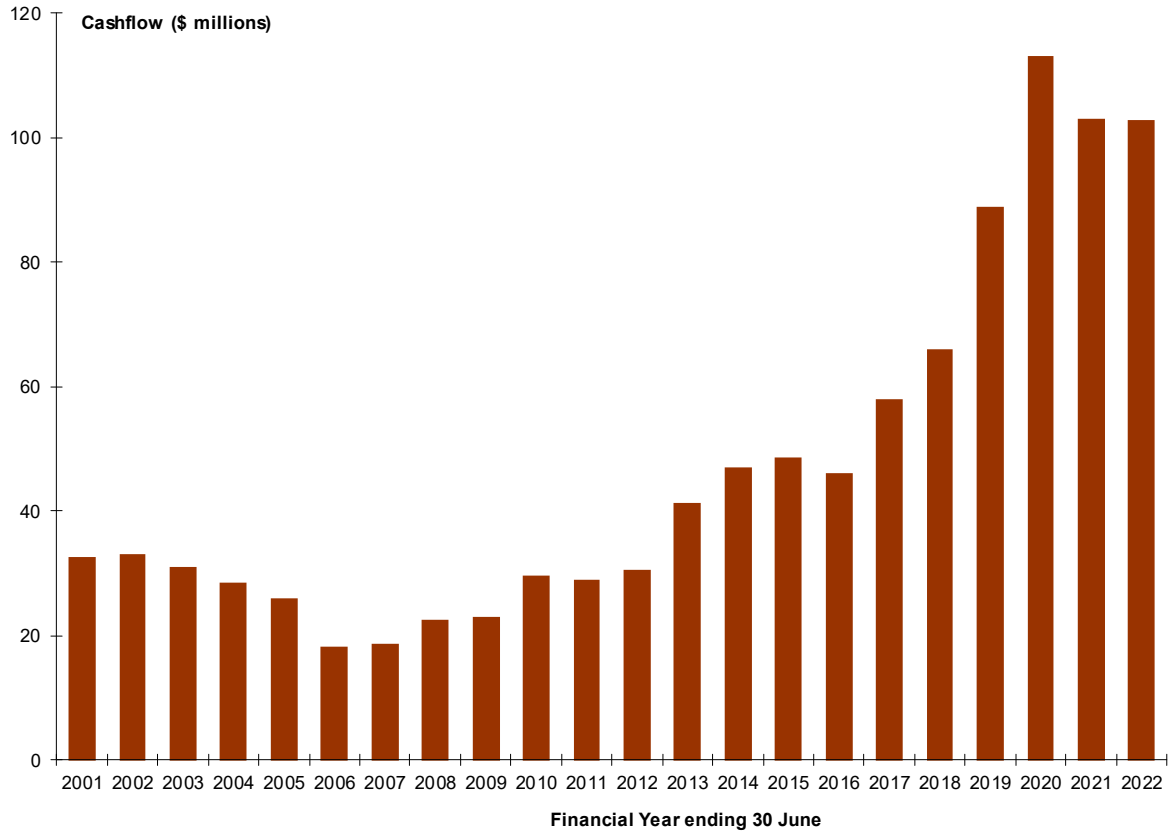
6.1.6 This year, DVA provided us with additional data in relation to an incapacity recipient's period of incapacity. This enabled us to assign revised incapacity start dates for those whose first payment was a lump sum. Note, we were unable to match incapacity periods for lump sum payments which occurred after a recipient's first payment. We will continue to work with DVA at future valuations to explore any additional available data to improve the allocation of short term and long-term recipients going forward.

6.1.7 This section deals with the valuation of short-term payments while the following section considers the valuation of long-term payments.

6.2 Recent Experience and Valuation Assumptions

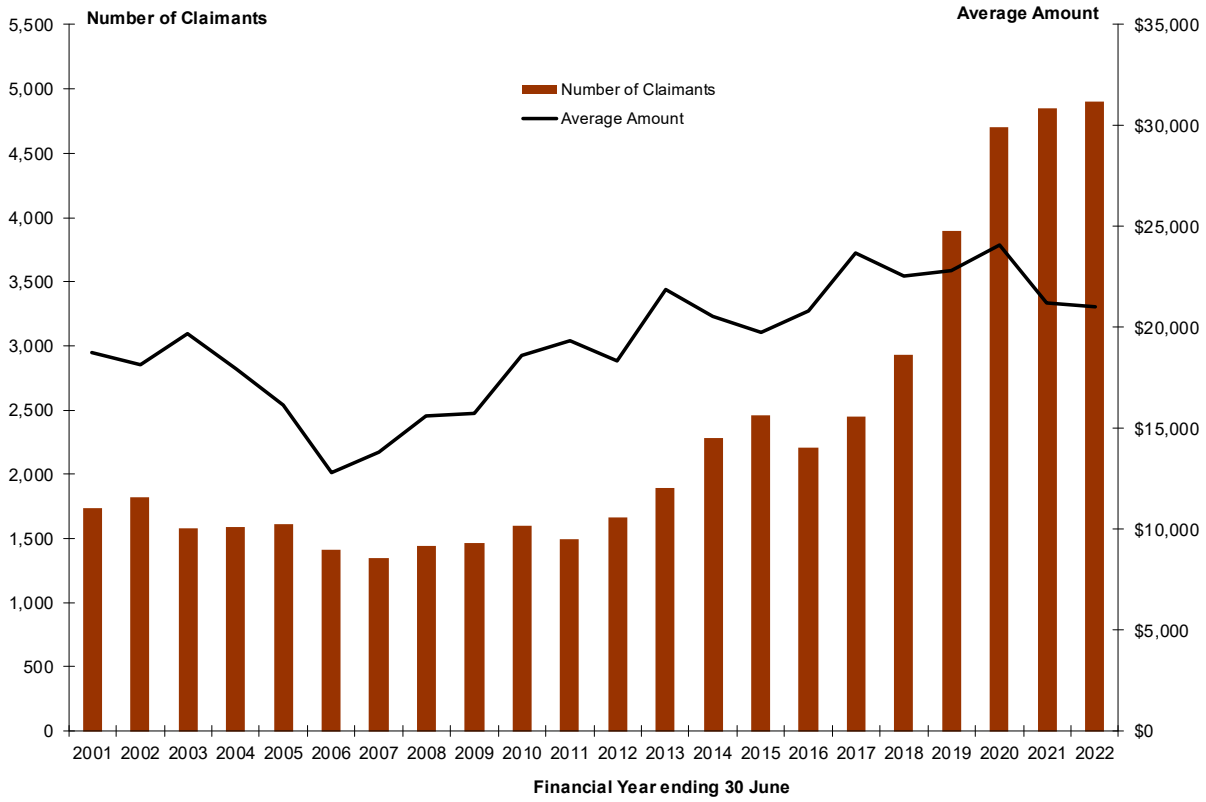
6.2.1 Figure 6.1 shows the expenditure on short-term incapacity payments since the turn of the century. From 2012 there has been a strong upward trend in expenditure, with significant increases in the 3 financial years to 2020. Expenditure in the latest two financial years is marginally below this peak, possibly due to processing capacity issues within DVA. Please note that these figures are net of accounts receivable, which have been a growing component over recent years as a result of offsetting benefits received by veterans including Defence invalidity pension payments.

Figure 6.1: Total expenditure on payments in the first 12 months of receipt



6.2.2 Figure 6.2 shows that early experience to 2012 was characterised by relatively stable claim numbers but increasing average payment size, particularly from 2006. From 2012 to 2017, we saw both increasing claimant numbers and increasing average payments. Since 2017, claimant numbers have continued to increase, albeit at a slower rate, while average payments have exhibited some stability in recent years. The average payment per claim will depend upon both the fortnightly rate at which benefits are being paid and the duration of the incapacity episode.

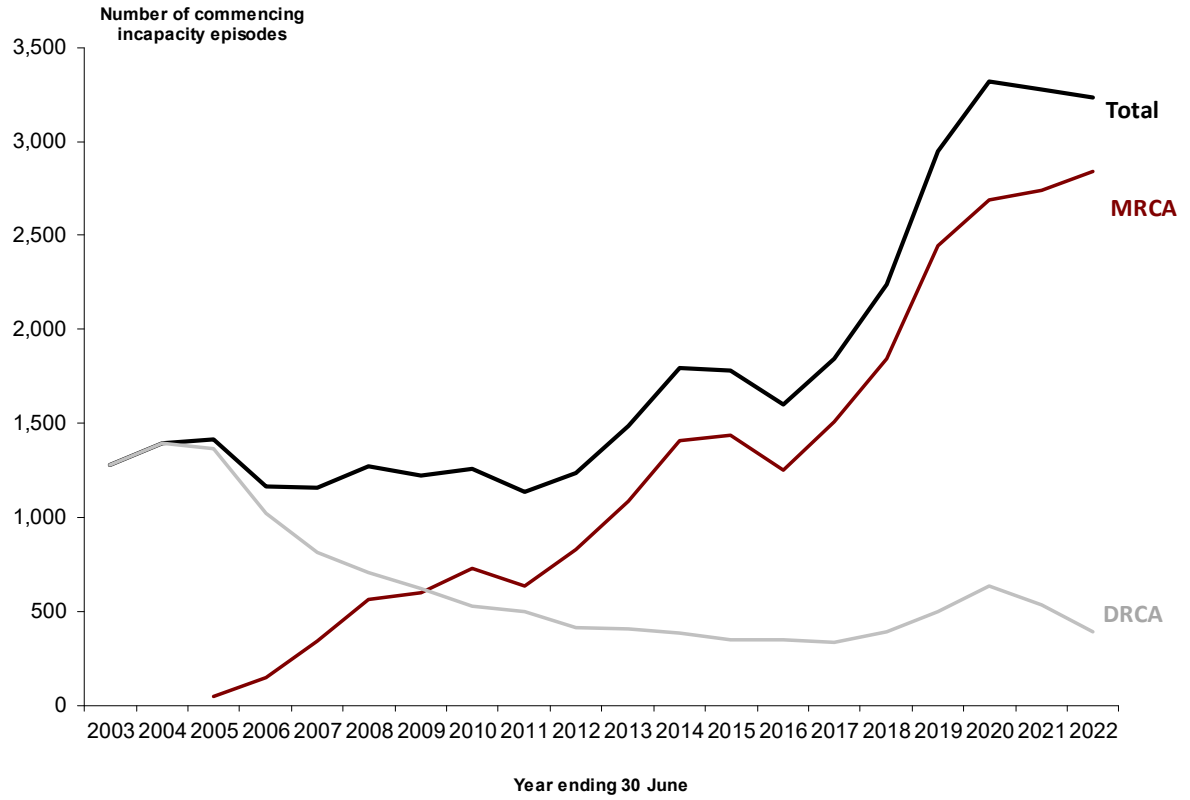
Figure 6.2: Number of short-term incapacity claimants and average annual payments



6.2.3 The approach to modelling incapacity used for the current valuation requires a projection of numbers of new incapacity episodes that commence during a year. Note that this is different from the figures shown in Figure 6.2 above, which include all people who received a payment during the year, not just those who commenced.

6.2.4 Figure 6.3 plots the numbers of new incapacity episodes under each scheme over the last 20 years. Although, the total number of new recipients has slightly decreased since 2020–21, driven by the experience in DRCA, this could be a result of processing capacity issues in initial liability and not a genuine reflection of incapacity experience.

Figure 6.3: Commencements of incapacity episodes by financial year



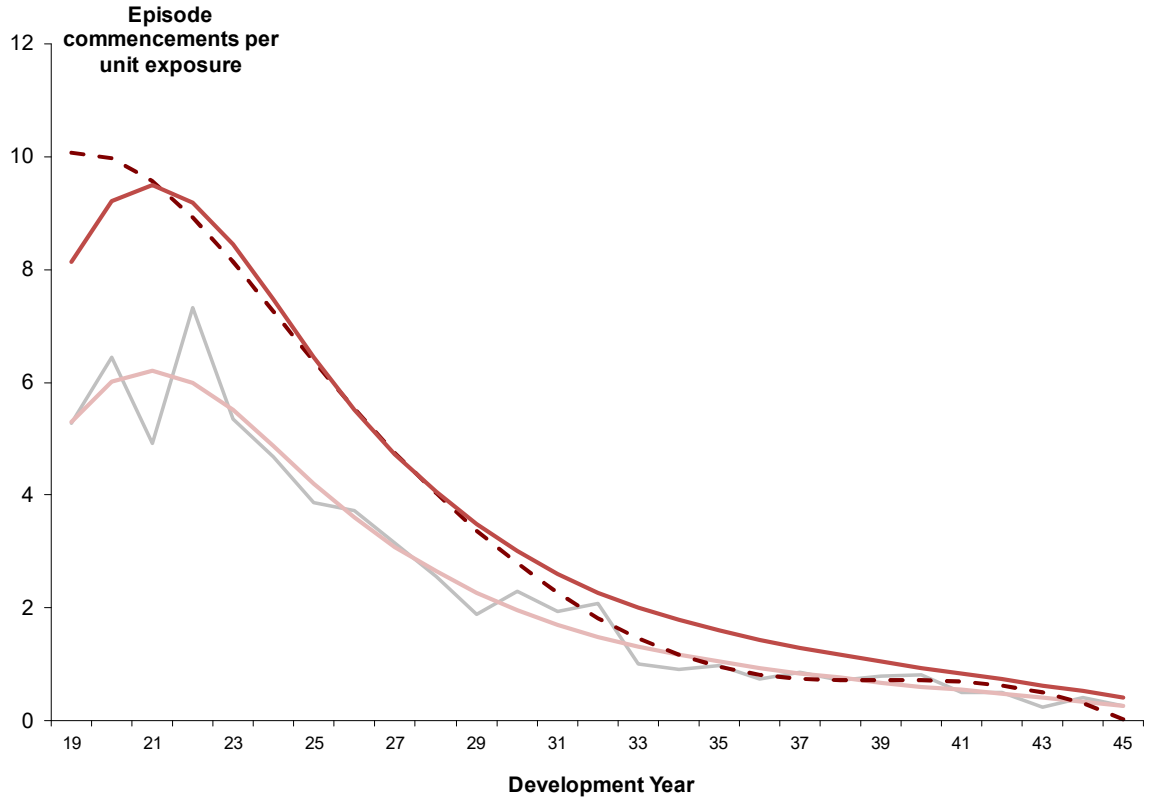
6.2.5 As discussed in section 5, the backlog in IL claims remains and could contain future incapacity recipients. It is therefore possible that the historical experience in Figures 6.4 and 6.5 below have been constrained by processing capacity limitations. We expect that additional delegates will be assigned to IL and the number of claims processed will eventually match lodgements. We calculated the number of claimants expected and created an adjustment factor by which we could increase the fitted curve to the selected curve which accounts for the IL backlog. The adjustment factor is based on the conversion rate between an accepted IL claim and a new incapacity episode. This conversion rate is then applied to expected accepted IL claims discussed in Section 5.3 to estimate the number of additional incapacity episodes in the absence of a claims backlog.

6.2.6 To project future claim numbers, we determined a pattern of episode emergence by accident year based on experience in the two most recent calendar years. This is then scaled upwards to account for the additional estimated incapacity episodes in the absence of a claims backlog.

6.2.7 A further short-term adjustment to claim numbers is applied to clear the existing IL backlog. This is consistent with the DDFM and assumes outstanding initial liability claims will be cleared by the end of 2023–24.

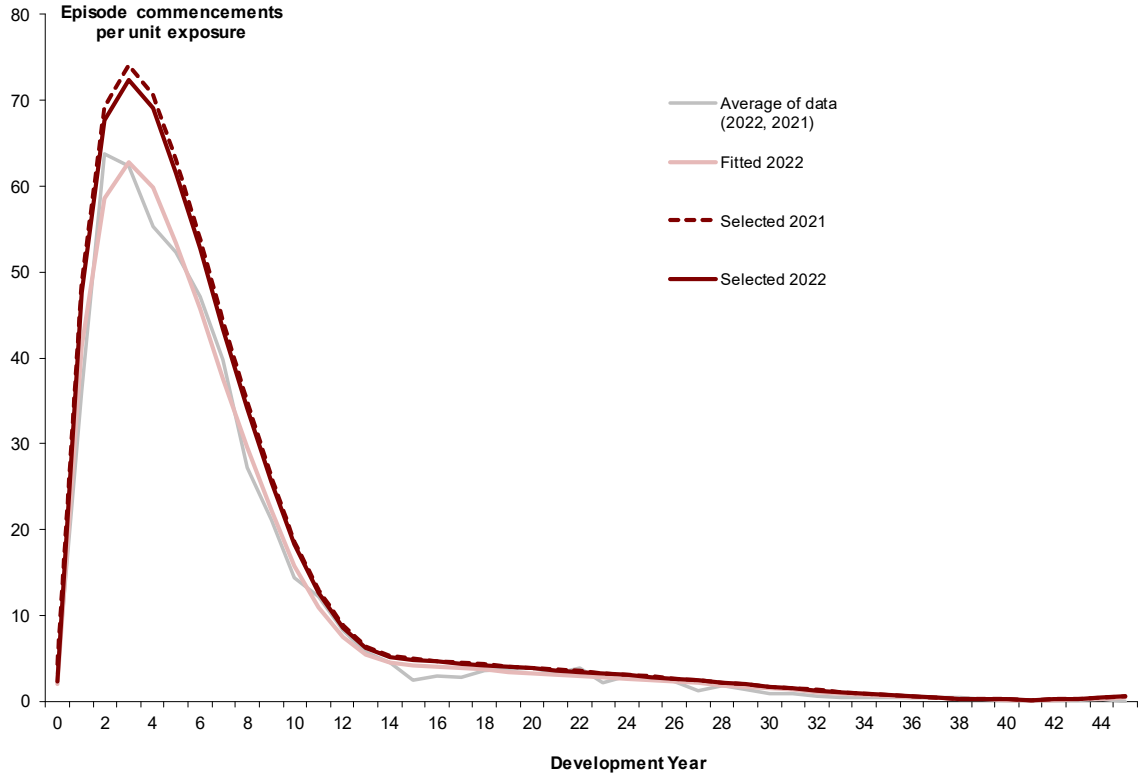
6.2.8 Figure 6.4 shows the raw rates for DRCA commencements, together with the fitted assumption based on the data, the selected assumption which adjusts this for the backlog, and the selected assumption from the previous year. Overall, the selected claim rates have remained similar to the rates selected at the previous valuation. Notably however, there is a shift to longer durations, indicating a recent increase in claims from older accident years.

Figure 6.4: DRCA incapacity commencements by development year



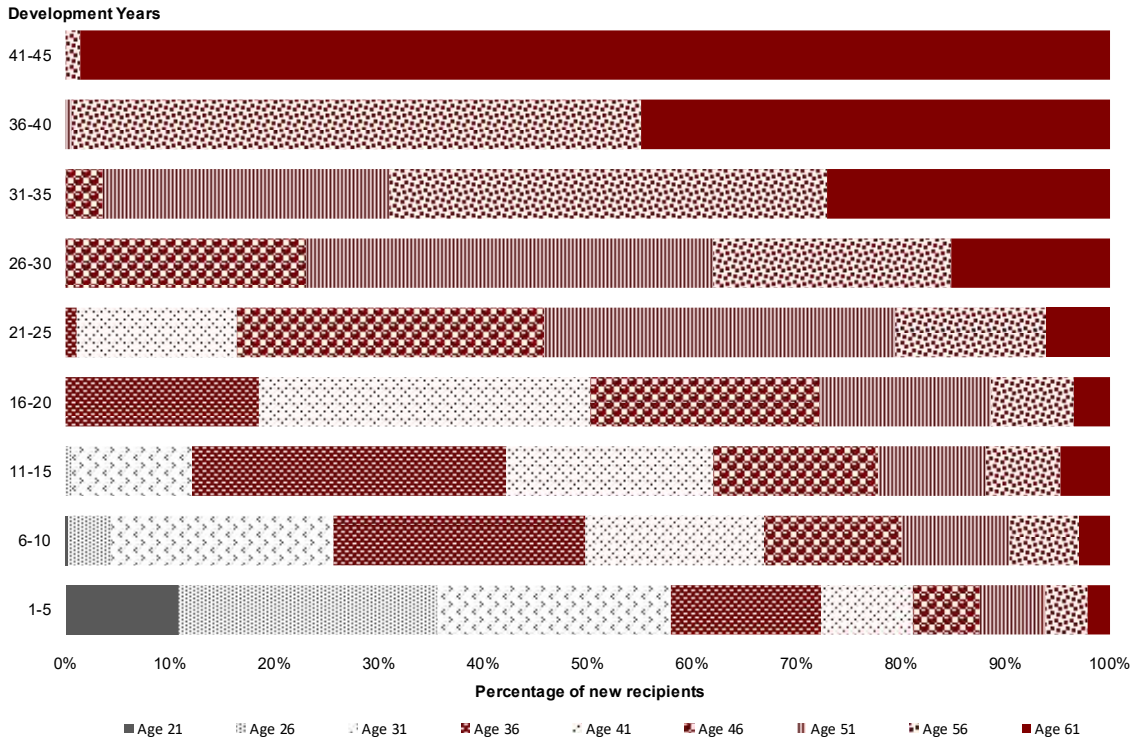
6.2.9 For MRCA, we only have 18 full years of experience, as such, we have no experience for development years beyond this. Current experience to date suggests that MRCA experience may emerge very differently to DRCA in the later development periods. At this valuation, we have fitted durations at later periods using a combination of experience in DRCA and the fitted curve should the MRCA experience at delay 18 continue. Figure 6.5 shows the raw rates for MRCA commencements, together with the fitted assumption based on the data, the selected assumption which adjusts this for the backlog, and the selected assumption from the previous year. Overall, the selected claim rates have remained similar to those adopted at the last valuation.

Figure 6.5: MRCA incapacity commencements by development year



6.2.10 Our analysis of the duration on benefits found that age is an important determinant for key assumptions such as survival rates, exit rates, and average size. The second step in the process is therefore to assign an age distribution to the population of new entrants. There is a clear relationship between the development year and age. For example, someone who is projected to commence on incapacity benefits 40 years after the event giving rise to the claim cannot be aged under 55. On the other hand, the age distribution for those commencing on benefits in the year of the accident will reflect the current age distribution of serving ADF personnel. We have used the age distribution by development year shown in Figure 6.6 to assign ages to projected new short-term recipients. This takes account of the increasing age of new recipients as duration between incident and claim increases.

Figure 6.6: Age distribution of new recipients by development year



6.2.11 Having assigned ages, the next step is to determine the probability of remaining on benefits. As noted above, this probability depends upon a claimant's age. We have modelled survival probabilities i.e. the probability of claim continuation for the first 12 months for 3 age groups: those aged less than 35 at the beginning of an incapacity episode, those aged between 35 and 49 inclusive, and those aged 50 or more. We have also modelled the DRCA and MRCA separately as there does appear to be some differences in experience. Note that for DRCA, the very small number of recipients under the age of 35 have been included in the broader "less than age 50" category.

6.2.12 Figure 6.7 shows the raw and fitted rates for DRCA and Figure 6.8 provides the corresponding information for MRCA. The curves show the proportion of recipients still in receipt of benefits, i.e., how much of the initial payment group remained after 1 fortnight, 2 fortnights, etc. Note, the probability current short-term recipients remain on benefit will depend on how many payments have been received thus far. From there, the fitted rates can be used to estimate future probabilities of receiving benefit, and the probability of ultimately becoming a long termer.

Figure 6.7: DRCA survival probabilities

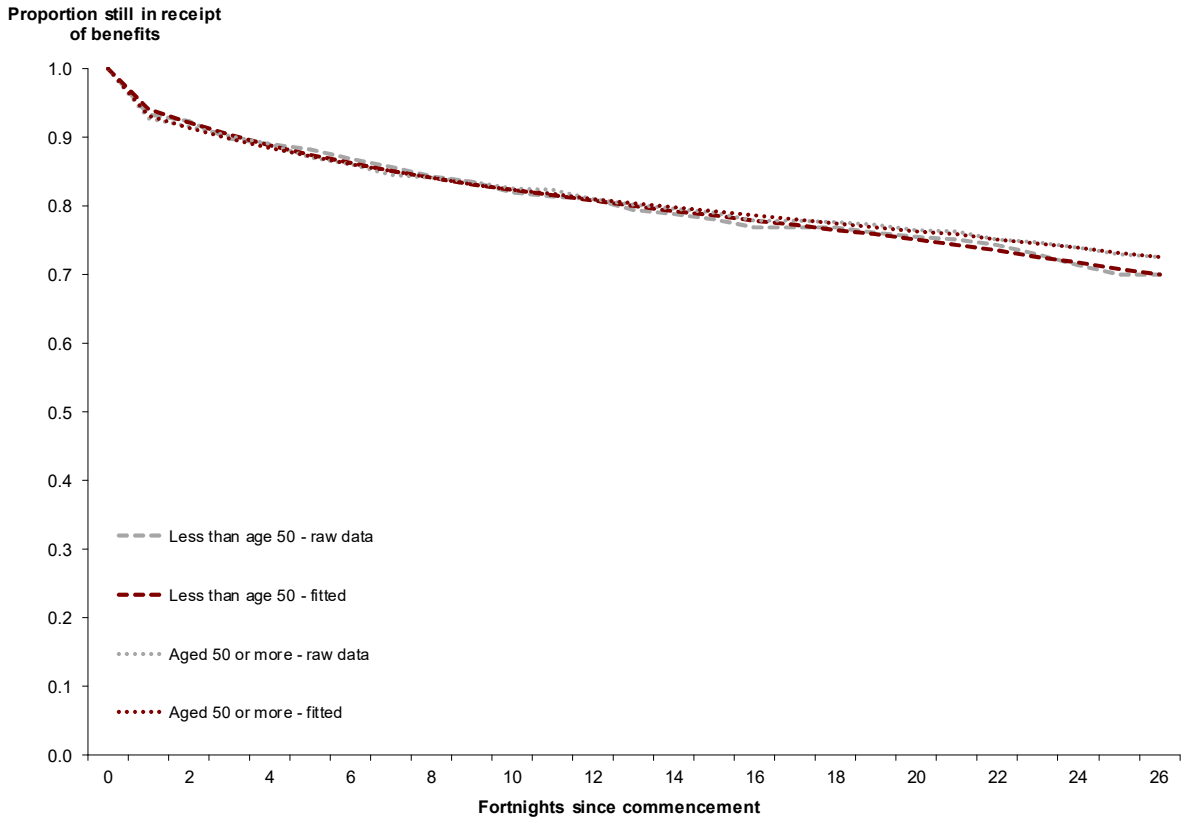
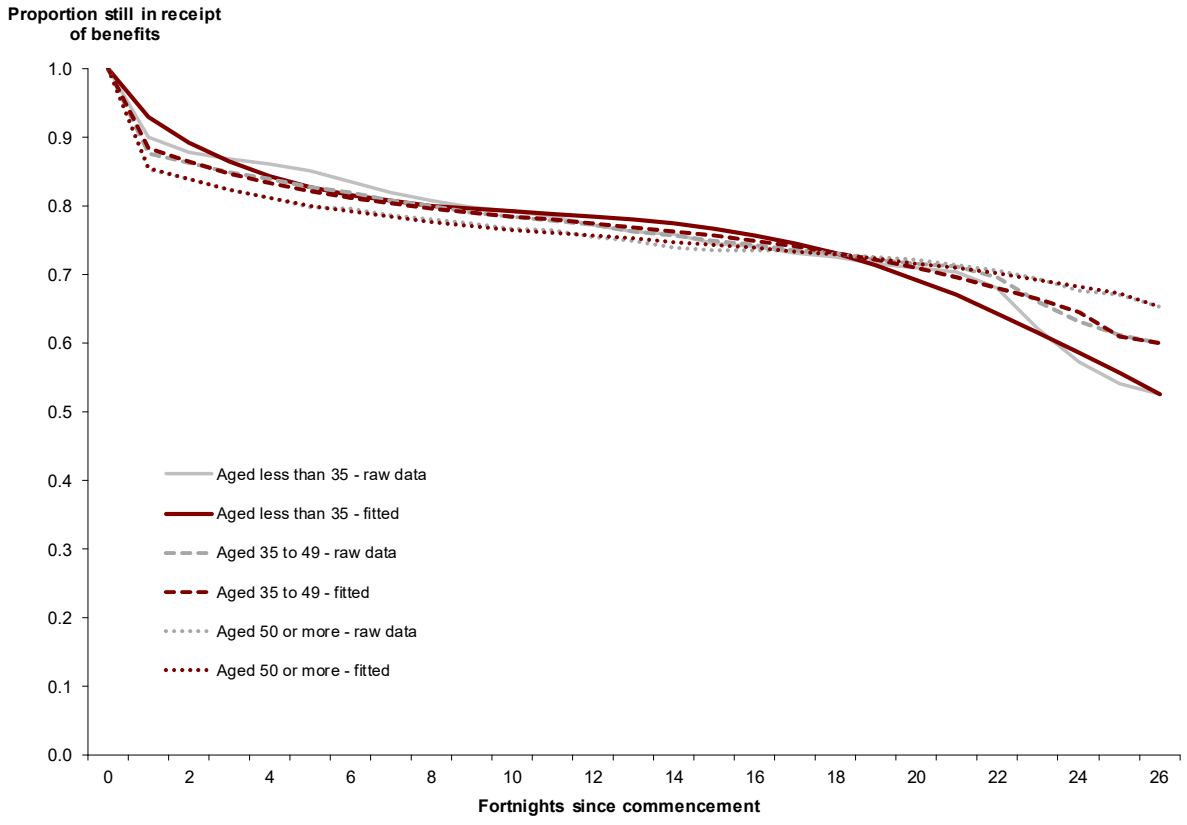
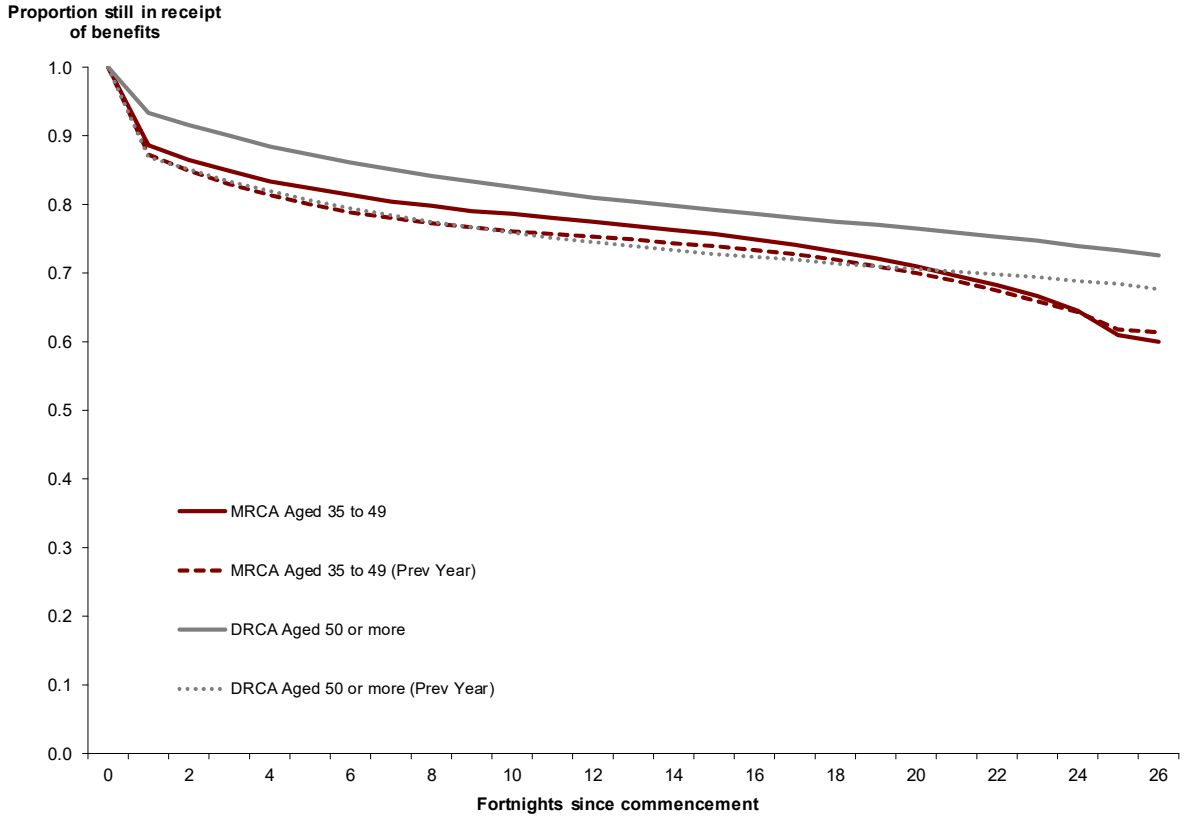


Figure 6.8: MRCA survival probabilities



6.2.13 The survival rate curves for older claimants in MRCA and DRCA have shifted upwards from last year. This shows a higher probability of receiving benefits over the first year of incapacity. Note for MRCA however, the probability of becoming a long termer decreases from fortnight 25. Figure 6.9 below shows a comparison of the rates selected this year compared to those selected last year.

Figure 6.9: Comparison of selected survival rates



6.2.14 The final element needed for projecting future outlays is the average rate of payment. Again, we found this depended upon age. As the benefit is an income replacement benefit, it is not unreasonable that income prior to injury is likely to be positively correlated with age. Historic experience suggests that the average payment in the first 12 months is different for individuals who exit within the first year and those that remain on benefits beyond the first year. That is, the average fortnightly payment for those whose episode lasted for less than 12 months was lower than for those who went on to become a long-term recipient. This might reflect the relative severity of the injuries involved. Table 6.1 sets out the rates of payment that are assumed to apply in 2022–23. Average payments for MRCA have decreased relative to last year as a result of adopting experience from the 2 most recent calendar years. This differs from the trendline fit used in the previous valuation. For later years, these rates are increased in line with the inflation rates set out in section 5.

Table 6.1: Assumed fortnightly rates of payment

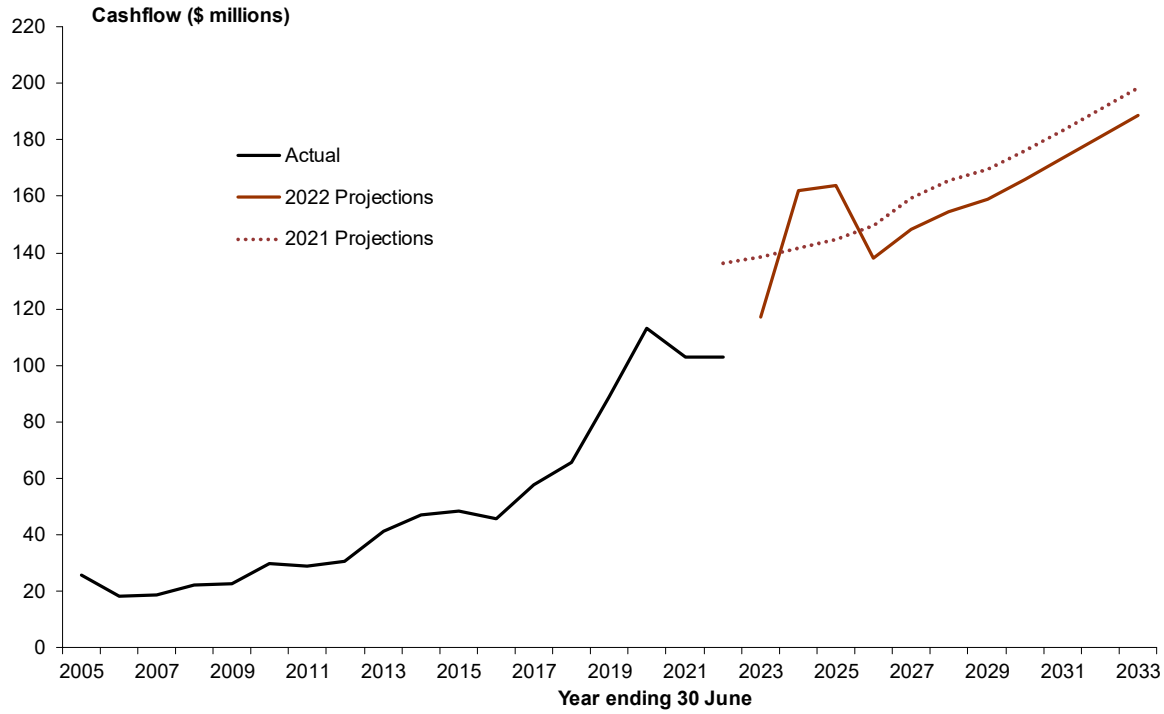
Age Group	DRCA	MRCA
Assumed duration 12 months or less		
Less than 35	N/A	$950
35 to 49	$1,483[3]	$1,234
50 or more	$1,801	$1,722
Assumed duration more than 12 months		
Less than 35	N/A	$1,465
35 to 49	$2,206	$1,863
50 or more	$2,424	$2,338

6.2.15 A divergence between the unit record and aggregate payments for DRCA incapacity has been observed since the 2015–16 financial year and has increased over time. At AGA's request, DVA has investigated this issue and has informed us that this could be due to a number of reasons including offset payments received from superannuation or debt repayments where a miscalculation of benefits has occurred. As these receivables are not recorded at the unit record level, we cannot make an adjustment at this level to our data. The divergence over recent years has been approximately 30 per cent of total DRCA incapacity expenditure, with the 2022 financial year showing a 34 per cent divergence in total expenditure. We have retained our assumption of a variable reduction to the projected outlays, however this year the reduction is assumed to increase and sustain initially before declining over time. This was selected in line with expectations from the valuation of long-term costs in military superannuation schemes where the number of new retrospective invalidity pensions paid are expected to decrease to zero over the next 10 years. As these form a large component of the current offsets seen in DRCA incapacity, we do not believe this to be an unreasonable point of comparison. We will continue to monitor this experience and adjust our projections accordingly should the accounts receivable data be made available at the unit record level in future.

6.2.16 Combining these assumptions together gives the projection of cashflows shown in Figure 6.10 below. Apart from the 2023 and 2024 financial years, the 10-year cashflows are slightly lower than in the previous valuation, primarily as a result of reduced average size assumptions. The cashflow in the first year consists of a number of claimants from the 2021–22 financial year. A large proportion of these claimants are expected to continue receiving some level of payment in the next financial year and, unless their first payment was at the very beginning of the year and they become classified as long-term recipients, will remain as short-term recipients into the next financial year. Beyond the first year, it is the projected number of new claimants only that contribute to cashflows. The short-term adjustment to clear outstanding IL claims applied this year also results in a surge in short term cashflows in the 2024 and 2025 financial years.

3 For DRCA, this group also includes those under age 35.

Figure 6.10: Historic and projected cashflows on short-term payments



6.3 Liability Estimate for Short-Term Payments

6.3.1 Table 6.2 shows the current estimate of the liability for short-term incapacity payments broken down by year of accident together with the liability estimated in the 2021 valuation.

Table 6.2: Outstanding claims liability as at 30 June 2022 for short-term incapacity payments by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) ($ m)
1979 and before	0.4
1980 – 1984	4.4
1985 – 1989	12.4
1990 – 1994	25.7
1995 – 1999	45.5
2000 – 2004	80.0
2005 – 2009	46.1
2010	13.2
2011	15.7
2012	19.0
2013	23.5
2014	29.6
2015	39.5
2016	50.5
2017	62.9
2018	75.2
2019	89.3
2020	102.2
2021	111.9
2022	113.5
Total	**960.6**
Expected at 30/06/2022	*980.1*
Total (30/06/2021)	**950.7**

6.3.2 In the 2021 valuation, we projected a liability as at 30 June 2022 of $980.1m. The revised estimate of the liability is $960.6m, this is $19.5m lower than the projected liability.

7 Valuing Long-Term Incapacity Payments

7.1 Modelling Approach

7.1.1 As discussed in the previous section, long-term recipients are a subset of the short-term population; that is, every long-term recipient must commence as a short-term recipient and can only transition to long-term status once benefits have been paid for a continuous period of 12 months. The liability in relation to long-term recipients can be considered to arise from 3 sources.

7.1.2 The first is those who had already been in receipt of benefits for 12 months or more and hence were classified as a long-term recipient as at 30 June 2022. The age distribution, length in receipt of benefits and rates of payment for this group are known. Using exit rates derived from past experience, we can estimate the probabilities of continuing entitlement and hence determine the present value of expected future payments.

7.1.3 The second group is those who were in receipt of an incapacity payment as at 30 June 2022 but had not reached the 12 month threshold to be classified as a long-term recipient. A proportion of this group would be expected to remain on benefits for 12 months and become long-term recipients. We have estimated the probabilities of this occurring for different age groups, given the current length in receipt of benefits, and then valued them as new long-termers from that point.

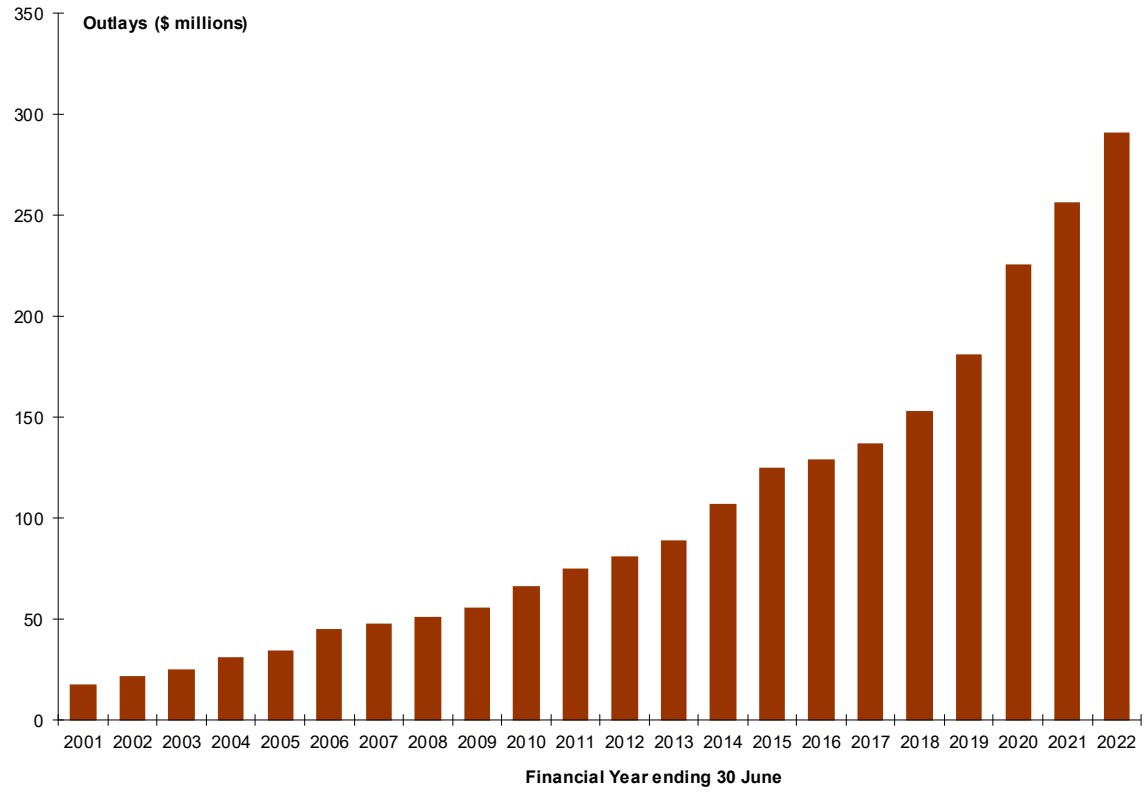
7.1.4 The third group is those who are expected to commence an incapacity episode in the future that relates to an incident that occurred prior to the valuation date. This is a subset of the projected short-term population described in the previous section. In this case, the probability of becoming a long-term recipient depends just upon age, since this group will have an initial duration in receipt of benefits of zero. Unlike the two previous groups, this group is entirely comprised of claimants who are yet to emerge and therefore involves the greatest uncertainty.

7.1.5 The projected cashflows arising from the second and third groups together comprise what we refer to as the Incurred But Not Reported (IBNR) liability, that is, the liability in respect of those who were not long-term recipients at the valuation date, but are projected to receive long-term incapacity payments in the future. Note that this differs from the normal insurance meaning where IBNR relates only to claims not reported at the valuation date.

7.2 Recent Experience and Valuation Assumptions

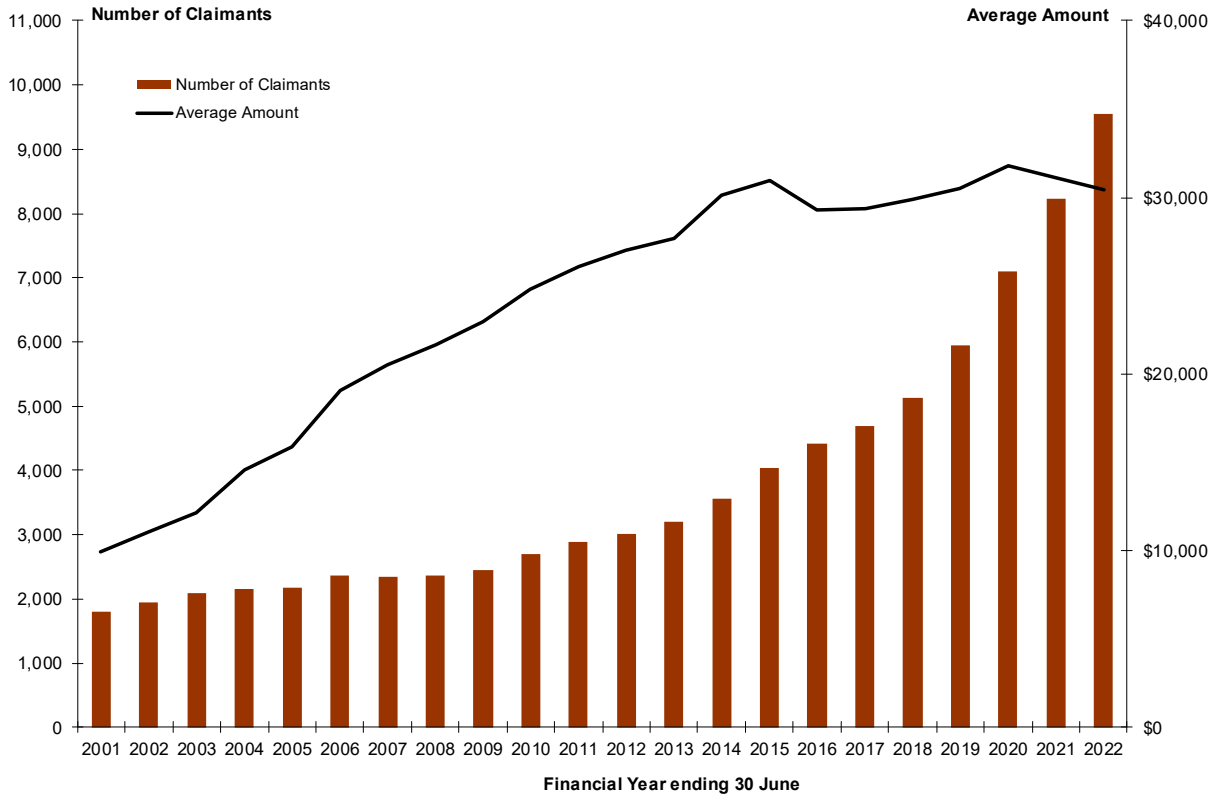
7.2.1 Figure 7.1 shows the expenditure on long-term incapacity payments since the turn of the century. The increasing trend in incapacity payments for long term recipients has continued in 2021–22.

Figure 7.1: Total expenditure on long-term payments (including adjustment payments)



7.2.2 As with short-term payments there was a period of relatively slow growth, but since 2010, outlays have grown substantially. Again, this has been primarily driven by the increase in the number of recipients, as shown in Figure 7.2. There has been a steady increase in the total number of claimants whilst the average payment has remained relatively stable in recent years. Note that the average payment is not the rate at which an individual claimant is being paid, but the average of the total amount paid during the financial year. Given that not everyone will be paid for the full year, the average payment shown here will be less than the average rate of payment at the end of the year.

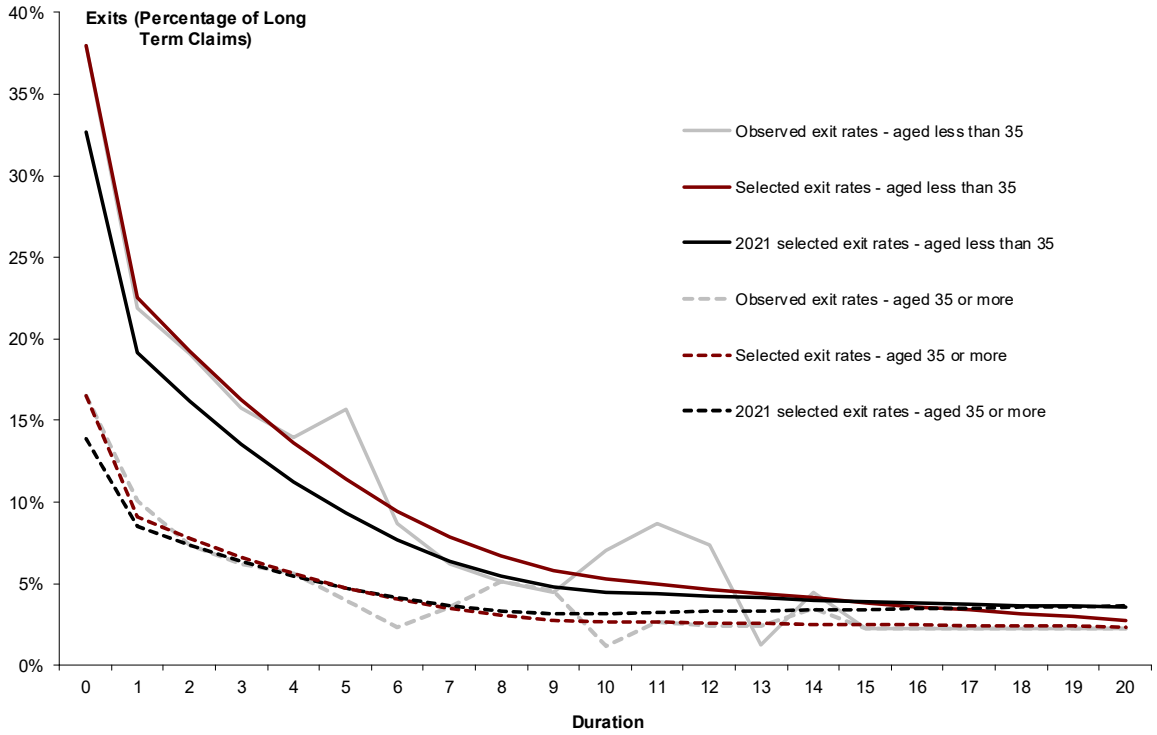
Figure 7.2: Total number of long-term incapacity claimants and average payments



7.2.3 For those who were long-term incapacity recipients as at 30 June 2022, the only valuation assumptions required relate to mortality, exits not due to mortality and payment inflation. We have used the mortality assumptions for invalidity pensioners from the latest available actuarial review of military superannuation. Payment inflation follows the assumptions set out in section 5.

7.2.4 The exit rate assumptions are a key driver of the liability estimate. In line with our analysis of short-term incapacity payments, we looked at exit experience using the same age groups. This showed a quite clear distinction between rates of exit for those aged more or less than 35 at the time the long-term episode commenced, but the age 50 threshold did not appear to be significant. We have therefore adopted separate assumptions for those aged less than 35 and those aged 35 or more. The two rates are expected to converge asymptotically after 20 years or so. Figure 7.3 shows the observed and selected exit rates for the two age groups.

Figure 7.3: Observed and selected exit rates



7.2.5 Relative to 2021, exit rates are higher for those aged under 35 across most durations. For claimants who are 35 or older, exit rates have increased slightly for earlier durations, but has decreased for longer durations

7.2.6 Figure 7.4 and Figure 7.5 below show annual exit rates for the latest five calendar years. Higher exit rates at early durations are largely driven by the most recent calendar year of experience which could reflect the recent strong employment market. Year on year exit rates are volatile, particularly at longer durations where there is limited data, and don't appear to exhibit any strong trends over time. We have set assumptions based on the most recent 2 calendar years of data to reflect recent scheme experience whilst also utilising more data to limit volatility.

Figure 7.4: Historic and Selected Exit Rates – Aged less than 35

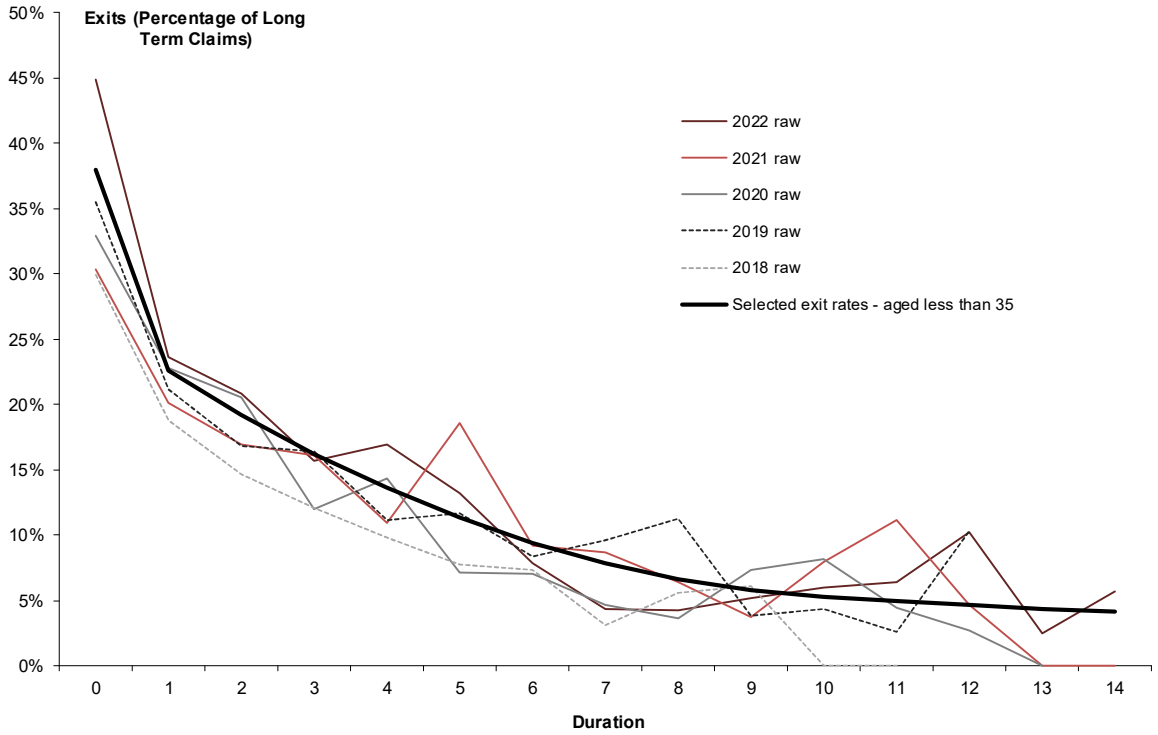
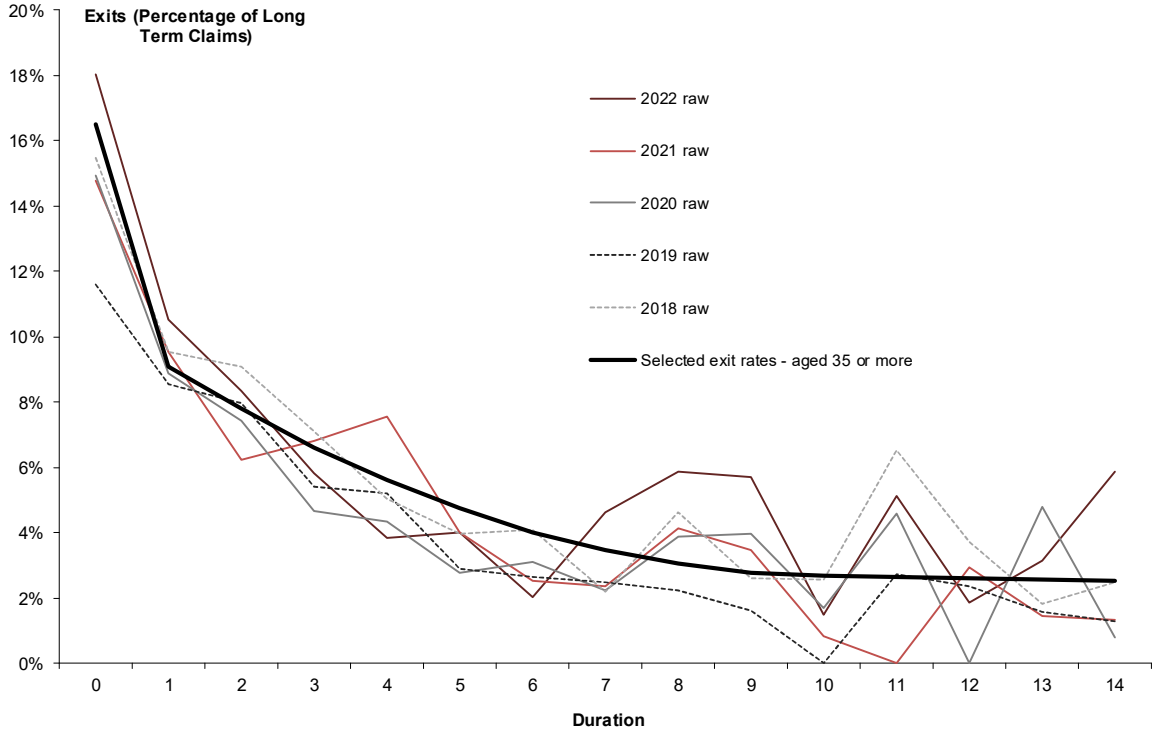


Figure 7.5: Historic and Selected Exit Rates – Aged 35 or more



7.2.7 The issue of relatively low exit rates is not unique to the MCS and is a common concern amongst other injury schemes with periodic benefits such as civilian workers compensation schemes. These schemes have often required multiple actions such as benefit redesigns, active monitoring of experience, and additional policy measures to encourage and enable claimants to transition back into the workforce.

7.2.8 As discussed in the previous section, the number of future long-term claimants is estimated based on the proportion of actual and projected short-term claimants who are assumed to reach 12 months on benefits. For existing short-term claimants, a probability is determined based on the number of fortnights on benefits as at 30 June 2022 and age at the time incapacity payments were first made. Figure 7.6 shows the probabilities of attaining long-term status for DRCA claimants and Figure 7.7 shows the equivalent information for MRCA claimants.

Figure 7.6: DRCA probability of becoming a long-term recipient

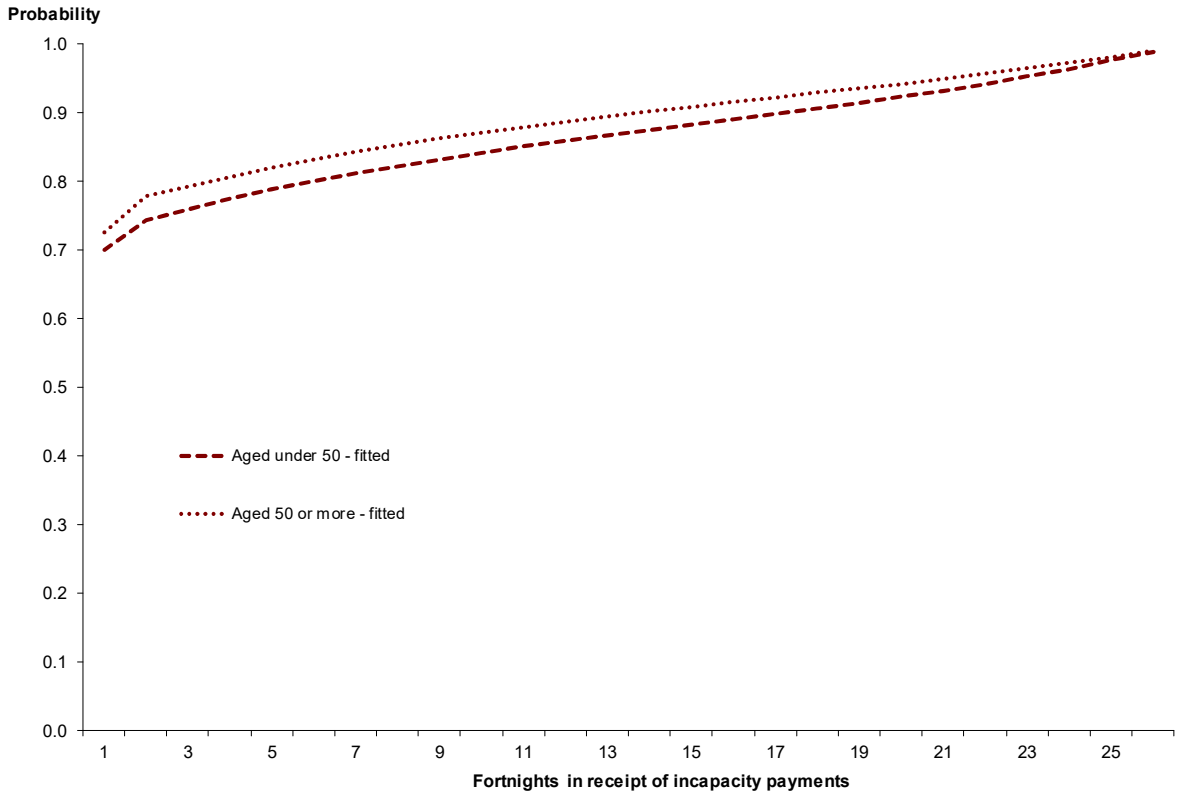
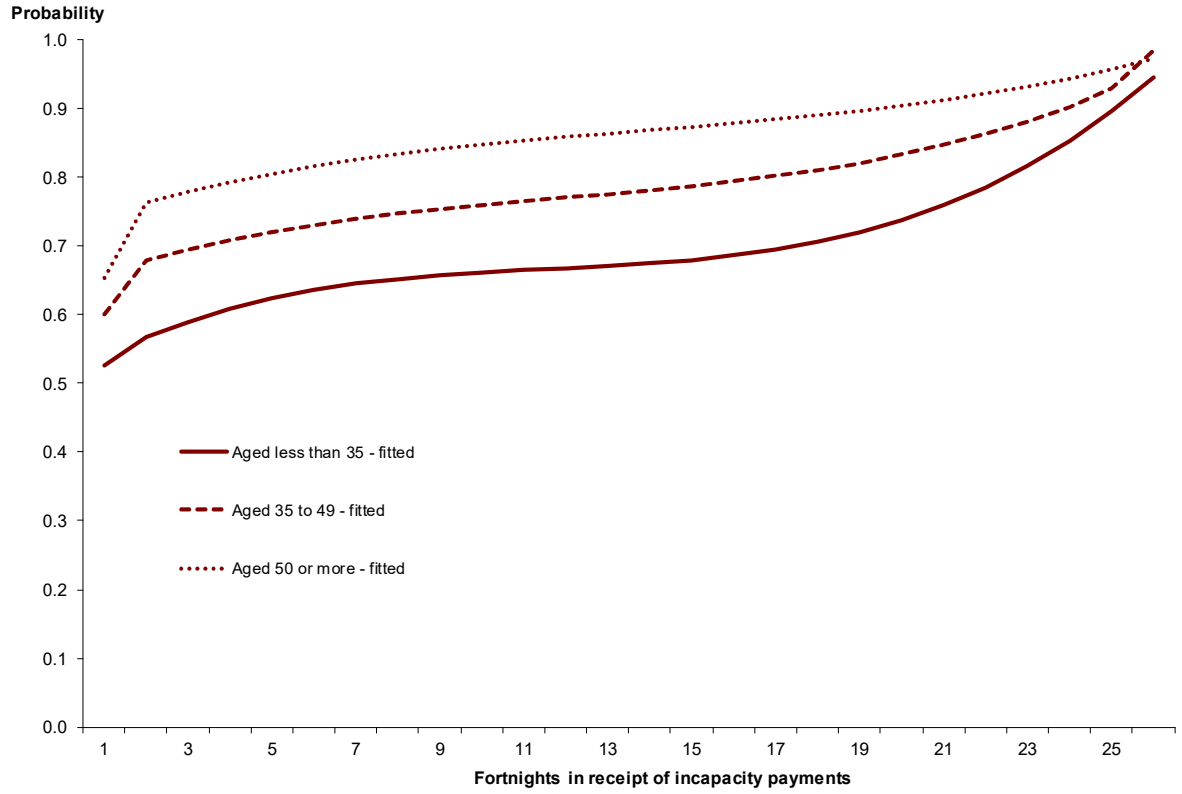


Figure 7.7: MRCA probability of becoming a long-term recipient



7.2.9 As would be expected, the probability increases with duration on benefits to date. What is perhaps more surprising, however, is the discontinuity between one and two fortnights on benefits. Those that receive benefits for two fortnights are significantly more likely to become long-term recipients than those who receive just one payment.

7.2.10 For projected future new short-term claimants, we use the probability for those with one fortnight of payment to determine the number that will go on to become future long–term recipients. These probabilities are shown in Table 7.1.

Table 7.1: Probability of a future short-term recipient receiving benefits for 12 months or more

Age group	DRCA	MRCA
Less than 35	N/A	0.53
35 to 49	0.70[4]	0.60
50 or more	0.73	0.65

7.2.11 Fortnightly payment rates for current long-term recipients are set at the rate that applied as at 30 June 2022 and inflated annually thereafter. Table 7.2 summarises the key statistics in respect of the 8,502 long-term recipients in payment as at the valuation date, together with the comparable statistics from the previous valuation.

4 For DRCA, this applies to all recipients under the age of 50.

7.2.12 The lifetime entitlement members are a grand parented group in the legislation whereby they can remain on incapacity payments beyond the retirement age. DVA were not able to provide the full list of claimants with a lifetime entitlement at this valuation. As such, statistical matching was performed between the data from this year and last year in order to retrieve the information of the ongoing lifetime group to the extent possible.

Table 7.2: Profile of existing long-term claimants as at 30 June 2022

	2022 Valuation	2021 Valuation
DRCA		
Number of recipients		
– with lifetime entitlement	39	46
– without lifetime entitlement	2,414	2,147
Total	2,453	2,193
Average fortnightly entitlement	$1,660	$1,633
Average age	54.4	53.5
Average duration on benefit[5]	8.0 years	8.1 years
MRCA		
Number of recipients		
– with lifetime entitlement	0	0
– without lifetime entitlement	6,049	5,096
Total	6,049	5,096
Average fortnightly entitlement	$1,316	$1,336
Average age	43.1	42.7
Average duration on benefit	3.9 years	3.7 years

7.2.13 As would be expected, the average age has increased across both schemes. MRCA recipients are on average younger than DRCA recipients and, given the positive correlation between age and salary, this feeds through into lower average fortnightly payments. The average duration on benefit has decreased slightly in the case of DRCA and remained relatively similar for MRCA. This could be a reflection of the higher numbers of new long-term recipients who have had shorter durations on benefits.

7.2.14 For current short-term recipients, an allowance needs to be made for the fact that the rate of payment reduces after 45 weeks on benefits. The adjustment factors used have been derived from the experience data and are shown in Table 7.3. Note that these ratios are applied to the actual rates of payment for short-term recipients.

5 Duration in this context is our estimate of continuous period on benefit.

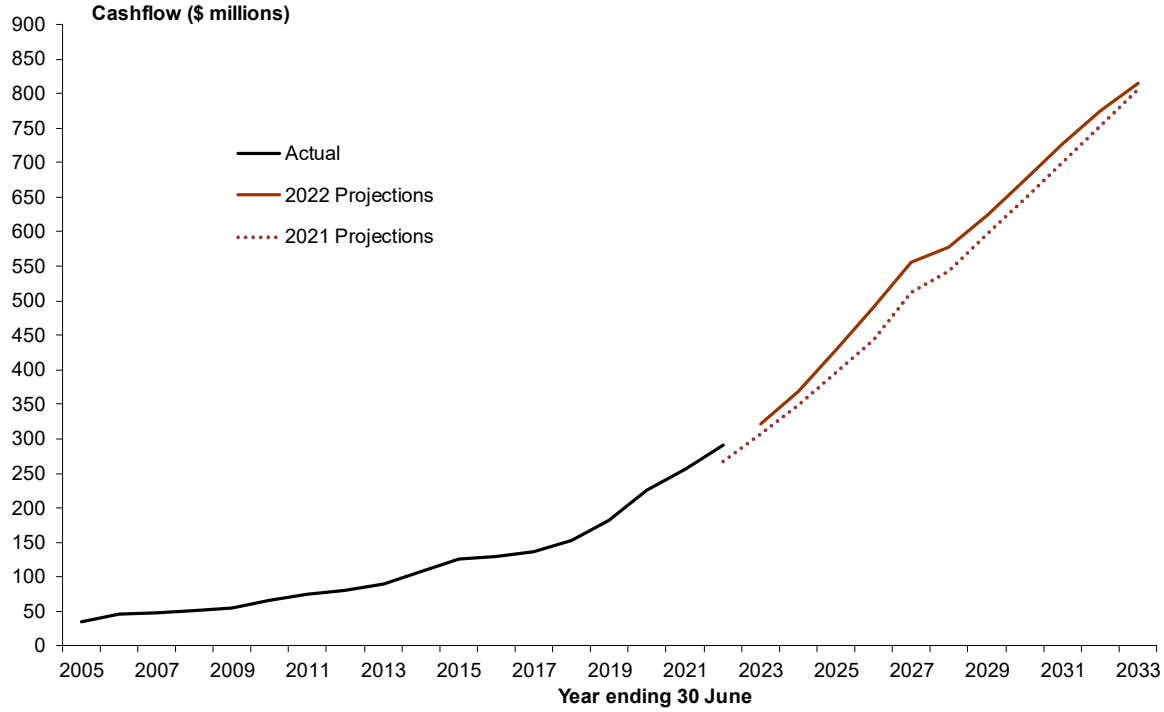
Table 7.3: Ratio between short-term and long-term fortnightly payments

Age group	DRCA	MRCA
Less than 35	N/A	0.70
35 to 49	0.73[6]	0.67
50 or more	0.75	0.70

7.2.15 For projected future long-term recipients, these ratios are applied to the rates of payment set out in Table 6.1 for those who are expected to become long-term recipients.

7.2.16 In combination, these assumptions yield the following pattern of future cashflows. Note that the slight uptick in 2027 is the result of the 27 paydays in that year. The increase in cashflows from the last valuation is primarily a result of higher numbers of expected long term recipients.

Figure 7.8: Historic and projected cashflows on long-term payments



7.3 Liability Estimate in respect of existing long-term claimants

7.3.1 Table 7.4 shows the incapacity payment liability estimate in respect of the existing long-term claimants broken down by year of accident. Note that we cannot definitively determine accident year for MRCA claimants and, where a claimant has multiple claims, we have used the average of all accident years recorded.

6 For DRCA, this applies to all recipients under the age of 50.

Table 7.4: Outstanding claims liability in respect of long-term claimants as at 30 June 2022

Year of Accident year ending 30 June	Number of long term claimants at 30/06/22	Liability ($ m)
1979 and before	58	5.6
1980 – 1984	97	10.8
1985 – 1989	185	31.6
1990 – 1994	415	85.1
1995 – 1999	719	189.1
2000 – 2004	979	303.8
2005 – 2009	1,034	472.0
2010	394	172.5
2011	471	204.8
2012	548	219.8
2013	603	239.1
2014	587	226.8
2015	512	179.2
2016	504	189.8
2017	469	171.3
2018	418	169.0
2019	327	117.5
2020	157	53.4
2021	25	9.8
2022	0	0.0
Total	**8,502**	**3,051.2**
Expected at 30/06/2022		*2,372.1*
Total (30/06/2021)	**7,289**	**2,491.1**

7.3.2 Note that the definition of long-term claimant means that the liability estimate in Table 7.4 for accident year 2021–22 must be zero. The liability for those injured during 2021–22 and projected to become long-term claimants is included in the IBNR estimates below.

7.3.3 Overall, the 2021 valuation would have projected the liability in respect of long-term incapacity claimants as at 30 June 2022 to be $2,372.1m. The liability at this valuation is $3,051.2m.

7.4 Liability Estimate in respect of IBNR claimants

7.4.1 Table 7.5 shows the estimate of the liability for long-term IBNR claims broken down by year of accident. Again, note that the allocation of liability to accident year should not be relied upon.

Table 7.5: Outstanding IBNR claims

Year of Accident year ending 30 June	Number of claimants	Liability ($ m)
1979 and before	19	0.8
1980 – 1984	129	9.2
1985 – 1989	308	34.4
1990 – 1994	624	96.9
1995 – 1999	1,091	217.9
2000 – 2004	1,955	460.1
2005 – 2009	915	220.7
2010	287	70.0
2011	363	90.5
2012	445	112.6
2013	568	145.3
2014	741	188.1
2015	987	252.6
2016	1,238	309.7
2017	1,501	364.0
2018	1,755	407.7
2019	2,091	462.8
2020	2,251	486.8
2021	2,262	481.7
2022	2,237	469.6
Total	**21,765**	**4,881.3**
Expected at 30/06/2022		*5,015.3*
Total (30/06/2021)	**21,765**	**4,311.5**

7.4.2 The liability as at 30 June 2022 is $4,881.3m. At the 2021 valuation, we were expecting a liability of $5,015.3m at 30 June 2022. This is a decrease of approximately $133.9m. The decrease to the IBNR liability has been driven by increasing exit rates, as well as a decrease in assumed average sizes for new entrants.

7.4.3 Overall, there has been an increase in the projected liability for incapacity payments. The increase was primarily driven by greater numbers of claimants entering the scheme.

8 Summary of Results for Incapacity Payments

8.1 Liability as at 30 June 2022

8.1.1 The following tables combine the results reported in the previous sections to give a total liability for all incapacity payments. Table 8.1 provides a reconciliation, to the extent possible, between the liability estimate as at 30 June 2021 and the current estimate at 30 June 2022.

Table 8.1: Reconciliation of liability estimates for incapacity payments

	$m
Liability estimate at 30/06/21 (previous valuation)	7,753.3
Assumed interest	393.1
Projected payments	(404.3)
Notional premium	625.4
Projected liability as at 30 June 2022 (previous valuation basis)	8,367.5
Experience effects and assumption changes	
change in experience	356.0
change in inflation and exposure assumption	514.0
change in short term / long term allocation	13.3
change in survival rates	(50.9)
change in exit rates	(238.7)
change in claims rates	(110.3)
change in age distribution	62.8
change in average size	(273.1)
change in accounts receivable assumption	(45.8)
inclusion of a backlog clearance	298.4
Current estimate	**8,893.1**

8.1.2 Table 8.2 shows the disaggregation of the incapacity liability by type of payment and year of accident

Table 8.2: Outstanding claims liability for incapacity payments as at 30 June 2022 – by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) $m			
	Short Term	Long Term	IBNR	Total
1979 and before	0.4	5.6	0.8	6.8
1980 – 1984	4.4	10.8	9.2	24.3
1985 – 1989	12.4	31.6	34.4	78.4
1990 – 1994	25.7	85.1	96.9	207.8
1995 – 1999	45.5	189.1	217.9	452.5
2000 – 2004	80.0	303.8	460.1	843.9
2005 – 2009	46.1	472.0	220.7	738.8
2010	13.2	172.5	70.0	255.7
2011	15.7	204.8	90.5	311.0
2012	19.0	219.8	112.6	351.5
2013	23.5	239.1	145.3	407.9
2014	29.6	226.8	188.1	444.5
2015	39.5	179.2	252.6	471.3
2016	50.5	189.8	309.7	550.0
2017	62.9	171.3	364.0	598.1
2018	75.2	169.0	407.7	651.8
2019	89.3	117.5	462.8	669.7
2020	102.2	53.4	486.8	642.5
2021	111.9	9.8	481.7	603.4
2022	113.5	0.0	469.6	583.1
Total	**960.6**	**3,051.2**	**4,881.3**	**8,893.1**
Total (30/06/2021)	**950.7**	**2,491.1**	**4,311.5**	**7,753.3**

8.1.3 Table 8.3 shows the breakdown of the liability estimate by Service Arm. Attribution to Service Arm was based on the relative percentages of incapacity payments made over the analysis period for each Service Arm. The IBNR was split in the same proportions as the existing long-term payments.

Table 8.3: Outstanding claims liability for incapacity payments as at 30 June 2022 – by service arm

	Liability (inflated and discounted) $ m			
SERVICE	Short-Term	Long-Term	IBNR	Total
Army	690.3	2,185.8	3,510.7	6,386.8
Navy	156.7	503.5	794.2	1,454.5
RAAF	113.5	361.8	576.4	1,051.8
Total	**960.6**	**3,051.2**	**4,881.3**	**8,893.1**

8.1.4 The proportion of the liability attributable to the different service arms are largely unchanged from the 2022 valuation, with the Army accounting for 71 per cent and Navy and RAAF for 17 per cent and 12 per cent respectively.

8.1.5 In accordance with PS302, we have also included the gross result without an adjustment for receivables from offsets (discussed in section 6.2). The gross liability for incapacity benefits is $9,257.4m.

8.2 Projected Cashflows

8.2.1 Cashflows have been projected for the following decade allowing for future injuries. Table 8.4 shows the projected cashflows in respect of injuries sustained before the valuation date under the DRCA, while Table 8.5 shows the cashflows in respect of injuries sustained before the valuation date under the MRCA. Table 8.6 shows the cashflows arising from injuries sustained after this date. Note that all figures are in nominal dollars, that is, they have not been discounted to 2022 dollars.

Table 8.4: Projected future incapacity payments for DRCA claims

	Payments (future dollars) $ m			
Year ending 30 June	Short-Term	Long-Term	IBNR	Total
2023	15.7	53.7	8.0	77.4
2024	21.8	50.1	16.0	88.0
2025	19.1	54.5	26.6	100.2
2026	14.9	57.0	41.1	113.0
2027	15.7	61.1	53.5	130.2
2028	15.5	58.9	60.0	134.5
2029	14.7	58.3	68.7	141.6
2030	13.9	59.1	76.3	149.3
2031	13.2	57.6	85.4	156.2
2032	12.5	55.5	89.4	157.4

Table 8.5: Projected future incapacity payments for MRCA claims incurred as at 30 June 2022

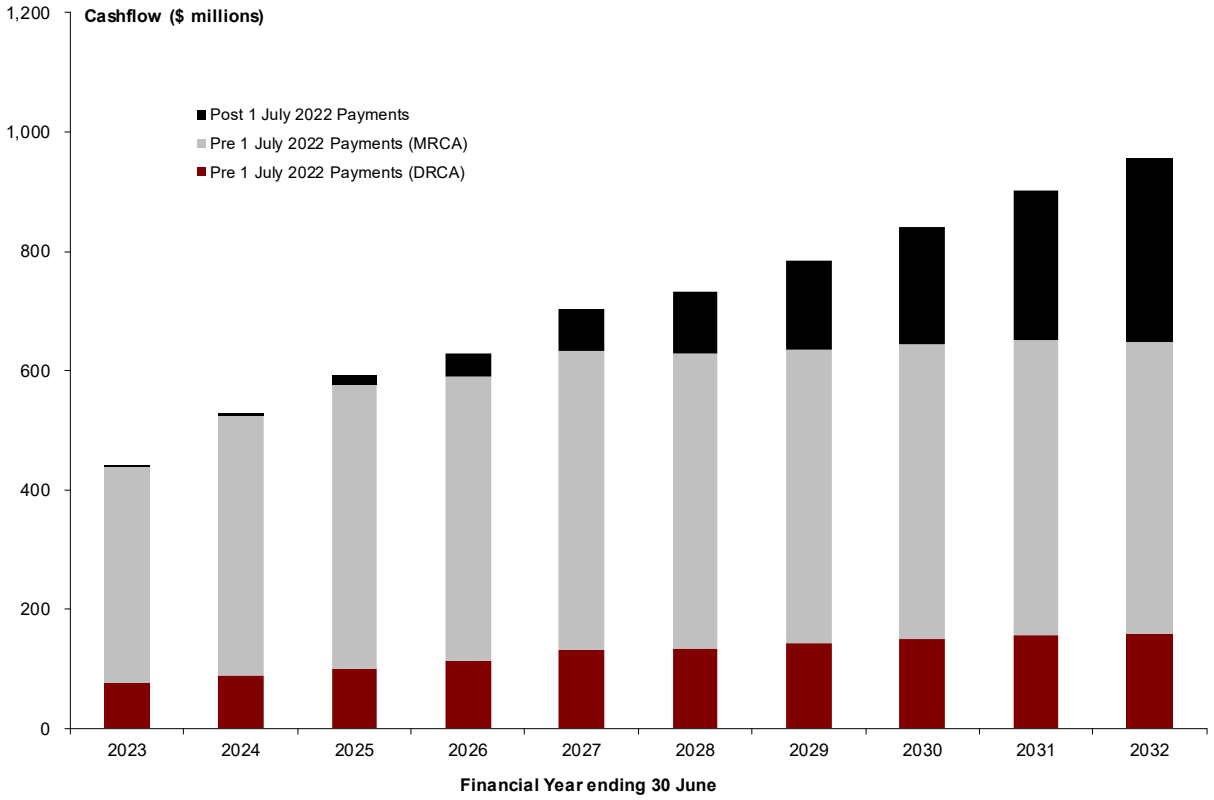
	Payments (future dollars) $ m			
Year ending 30 June	Short-Term	Long-Term	IBNR	Total
2023	101.2	209.1	51.1	361.3
2024	135.6	198.3	103.5	437.4
2025	129.8	189.5	156.6	475.9
2026	93.6	183.2	199.9	476.7
2027	83.6	184.8	235.3	503.7
2028	71.0	173.5	248.2	492.7
2029	57.7	169.9	266.5	494.2
2030	47.0	167.2	281.6	495.8
2031	38.0	164.4	293.2	495.6
2032	30.8	161.3	299.0	491.0

Table 8.6: Projected future incapacity payments for claims incurred after 30 June 2022

	Payments (future dollars) $ m			
Year ending 30 June	Short-Term	Long-Term	IBNR	Total
2023	0.2	0.0	0.0	0.2
2024	4.5	0.1	0.0	4.6
2025	14.8	2.2	0.0	17.0
2026	29.6	8.3	0.0	38.0
2027	48.8	20.5	0.0	69.3
2028	68.0	37.1	0.0	105.2
2029	86.5	61.0	0.0	147.5
2030	105.1	91.3	0.0	196.4
2031	122.4	127.7	0.0	250.1
2032	137.9	169.3	0.0	307.3

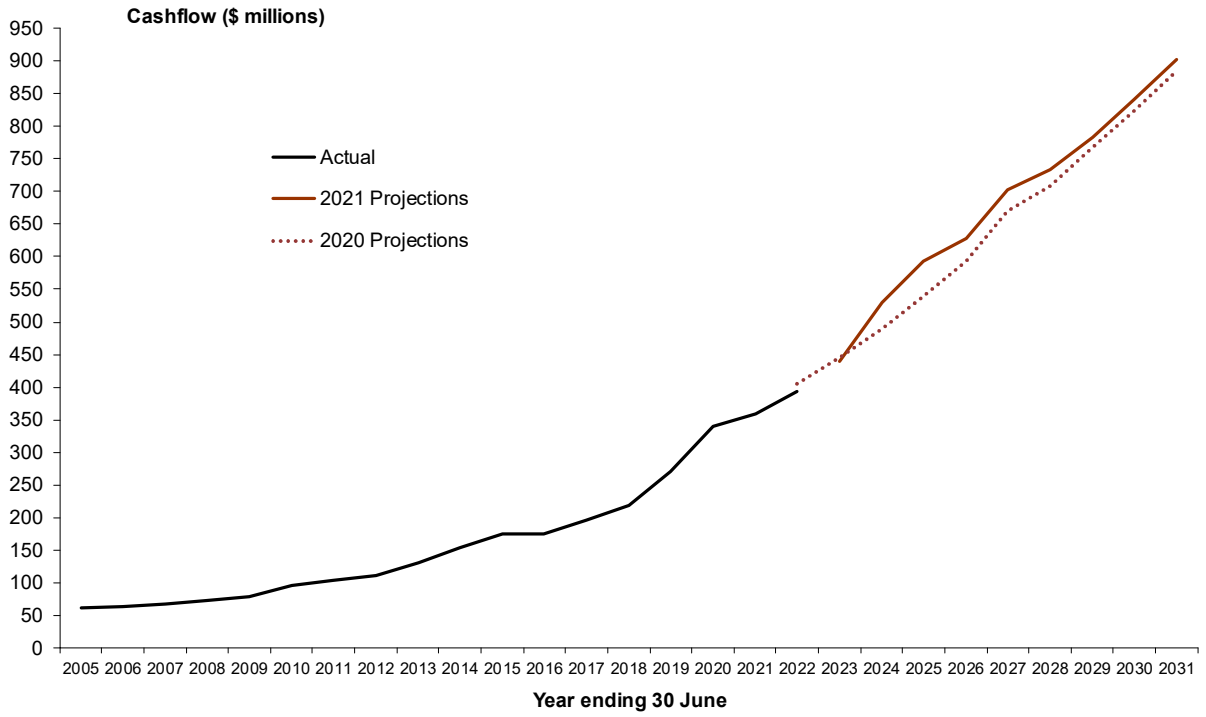
8.2.2 Figure 8.1 shows this information graphically. The long-term nature of the obligation to make incapacity payments is clearly evident, with payments in respect of claims incurred prior to the valuation date falling only very slowly over the projection period.

Figure 8.1: Projected incapacity payments



8.2.3 Finally, Figure 8.2 shows actual and projected cashflows for all incapacity payments. The projections from the previous year's valuation are included for comparison and illustrate the impact which the changes in assumptions have had on anticipated outlays.

Figure 8.2: Historic and projected cashflows on incapacity payments



9 Valuing Non-Incapacity Benefits – DRCA Permanent Impairment and Non-Economic Loss

9.1 Modelling Approach

9.1.1 Under DRCA, lump sum payments are made where a service person suffers a permanent impairment. In most cases, a further lump sum payment is made to compensate for non-economic loss. In the past, we have modelled these two payments separately. More recently, the strong correlation between the two payments has led us to simplify the approach and model the combined payment.

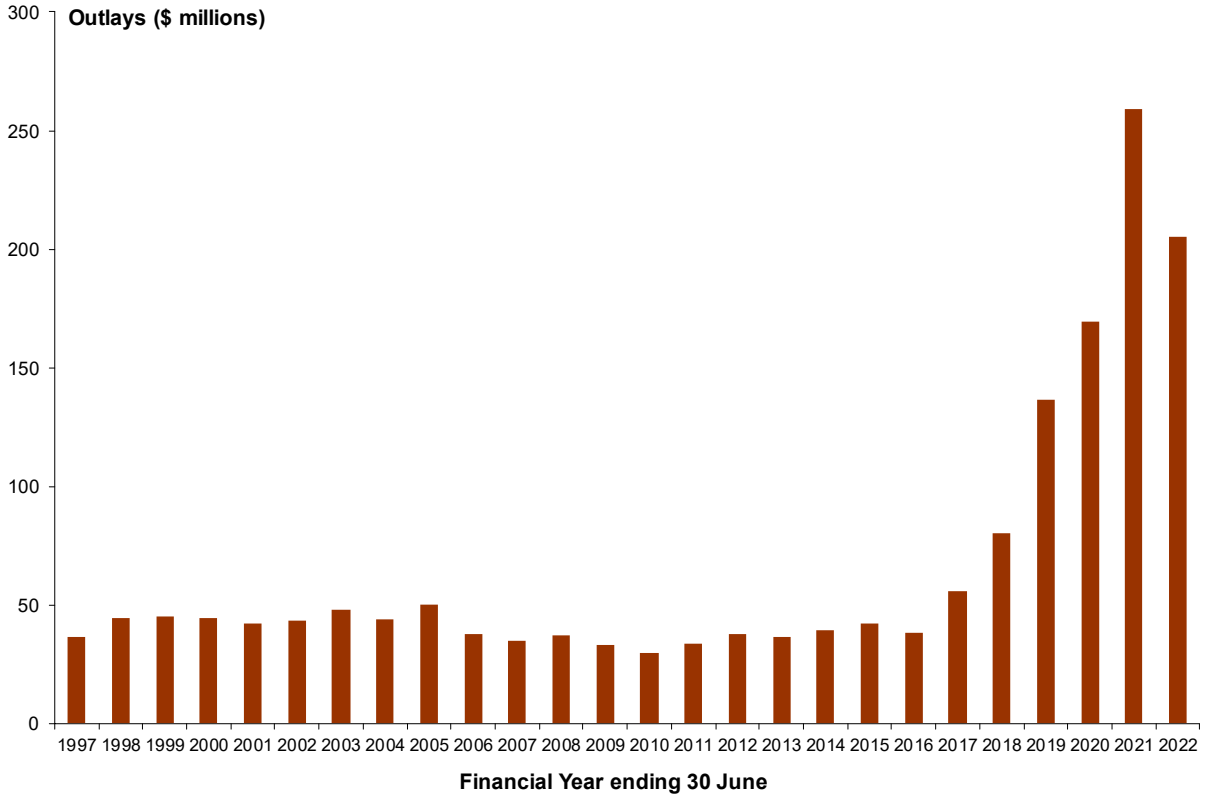
9.1.2 The modelling approach taken with DRCA payments was to look at the number of claims by development year per unit of exposure. Exposure is measured by the number of equivalent full time defence personnel, defined as the number of full time personnel plus 15 per cent of the number of reserve personnel. An average size is then applied to estimate the quantum of permanent impairment payments arising in each year, with an allowance for superimposed inflation to increase the average size over time.

9.1.3 For the current valuation, we have revised our methodology of allowing for the current backlog of claims, both in initial liability and permanent impairment. This revised approach is a 'top down' approach which considers the rate of IL lodgements and applies various conversion factors to estimate the number of PI claims that would have been paid in the absence of claims processing constraints. The actual experience is then compared with the theoretical number of PI claims, and a factor is applied to the actual claims curve. The scaled claims curve is used to project the future rate of PI claims. An additional allowance has been included to explicitly account for the existing backlogs of open claims in IL and PI.

9.2 Recent Experience and Valuation Assumptions

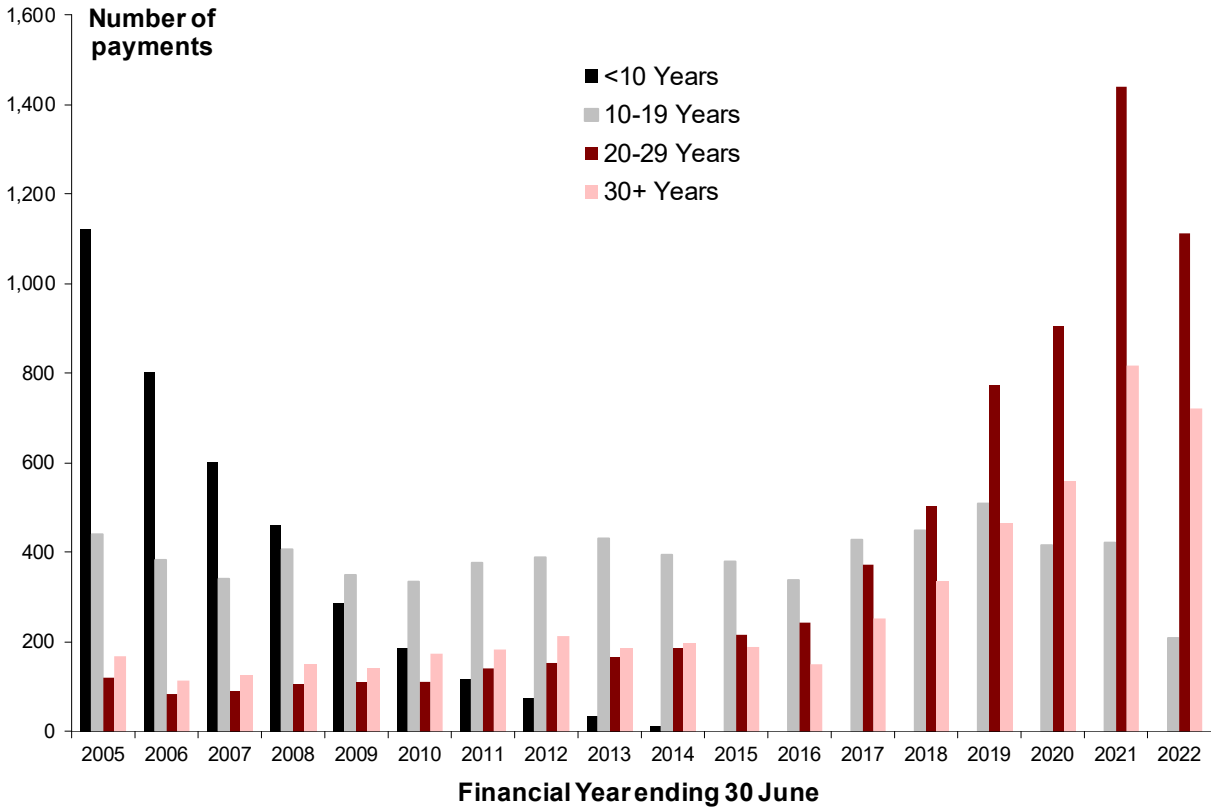
9.2.1 Figure 9.1 shows the expenditure on permanent impairment (including non-economic loss payments for DRCA) over the last two decades.

Figure 9.1: Expenditure on DRCA permanent impairment payments



9.2.2 Despite the closure of DRCA for injuries occurring after 1 July 2004, outlays have been trending upwards since reaching a minimum in 2009–10. Expenditure has significantly increased year on year since 2016–17, with the highest expenditure seen to date in 2020–21. While expenditure in the most recent financial year has decreased, outlays are being supressed by processing constraints in DRCA IL and PI processing. The disaggregation of the claim numbers by the age of injury at the time of settlement in Figure 9.2 provides some evidence of what is driving this result.

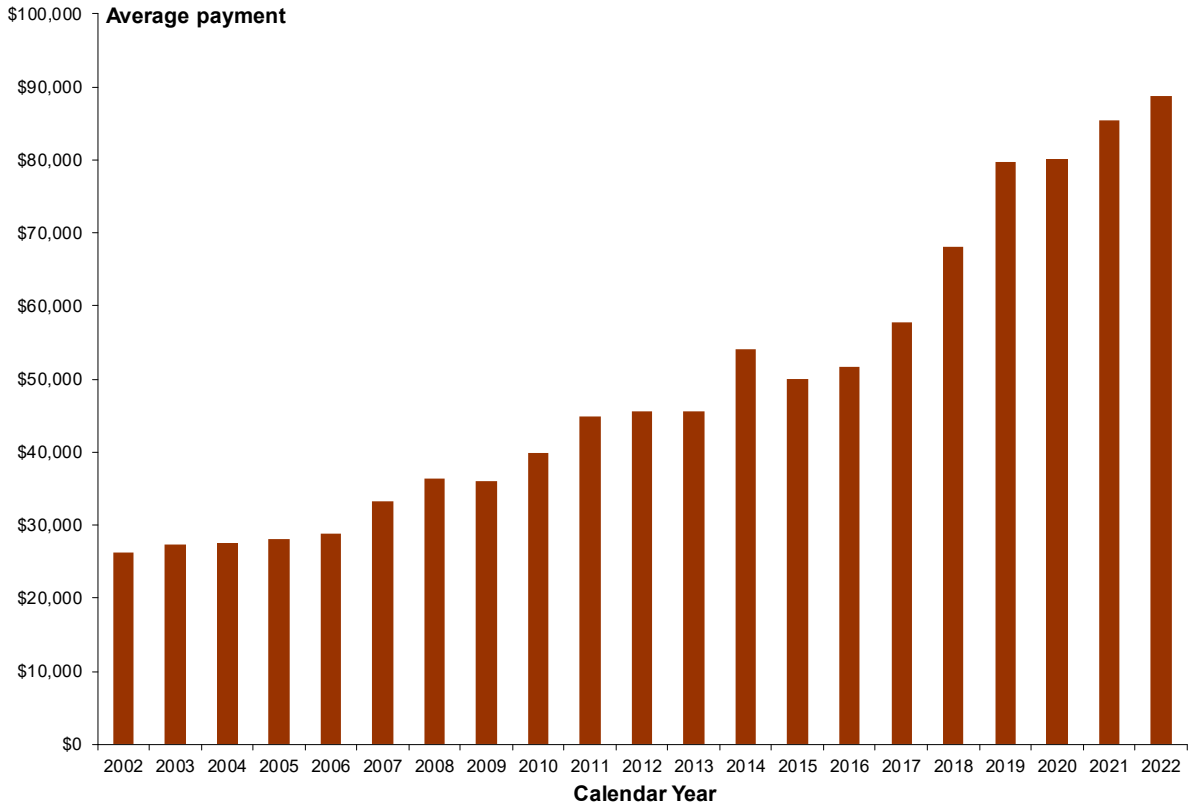
Figure 9.2: Age of DRCA permanent impairment claims at time of payment



9.2.3 The disappearance of short duration claims is due to the time elapsed since closure of access to the scheme. Claims of duration less than 10 years ceased 10 years after access closed. Claims from 10–19 years should cease in the next 1–2 years. However, there has been a marked increase in longer duration claims. Part of the explanation for the rise in long duration claims is likely to be the various Court decisions mentioned earlier which have effectively expanded access to permanent impairment payments. In this regard, it is important to note that, unlike MRCA, there is no limit on the total amount which can be paid to compensate for permanent impairment.

9.2.4 The impact of the increasing numbers of claims is magnified by the substantial increase in the size of payments made in respect of these claims, as shown in Figure 9.3.

Figure 9.3: Average size of DRCA permanent impairment payments



9.2.5 The average sizes of PI lump sums increased relatively slowly prior to closure of the scheme. Payments then increased from 2006 to 2011, before stabilising temporarily over the 3 years from 2011 to 2013. From 2016 to 2022 the average size increased year on year. Overall, the annual growth rate has averaged around 8 per cent per annum since 2006. However, the average annual growth rate across the last 3 calendar years has been around 4 per cent, suggesting the rate of annual growth may be beginning to stabilise.

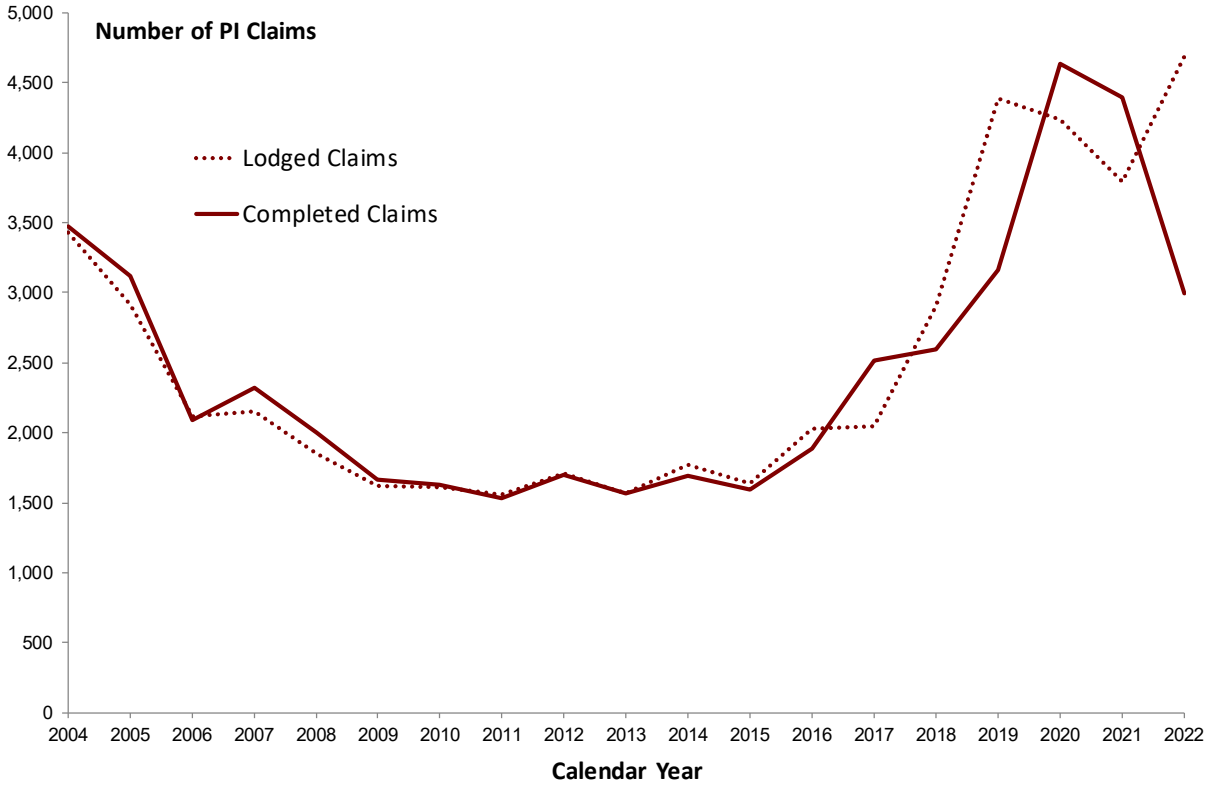
9.2.6 As in 2021, we have adopted a combined average claim amount which covers both permanent impairment and non-economic loss payments. We have adopted a single rate of $87,000, based on actual payment experience over the last two calendar years; this is slightly lower than the inflated assumption from the 2021 valuation of $88,200. While, in theory, these payments are indexed in line with the CPI, in practice, the average payment has increased by more than double this index over the last 15 years. As such, we have retained the 2021 assumption that average claims will increase by 5 per cent per annum in the long term.

9.2.7 The backlogs in both initial liability and permanent impairment persist and continue to distort the observed payment experience. Although the increase in the rate of IL claims lodged has stabilised over the past few years, and declined slightly over the last 12 months, there remains a large number of unprocessed DRCA IL claims which have accumulated due to ongoing limitations in processing capacity.

9.2.8 PI claims lodged have increased over the past 12 months, although this is likely a direct result of the increase in IL claims completed during this time. Despite the increase in PI claims lodged over the year, the number of PI claims completed has dropped to 2019 levels, potentially reflecting ongoing resourcing constraints. The PI backlog has continued to grow since the

previous valuation and will likely increase over the short to medium term as the IL backlog is cleared. Figure 9.4 below shows the level of lodged and completed PI claims by calendar year.

Figure 9.4: Lodged and Completed PI Claims



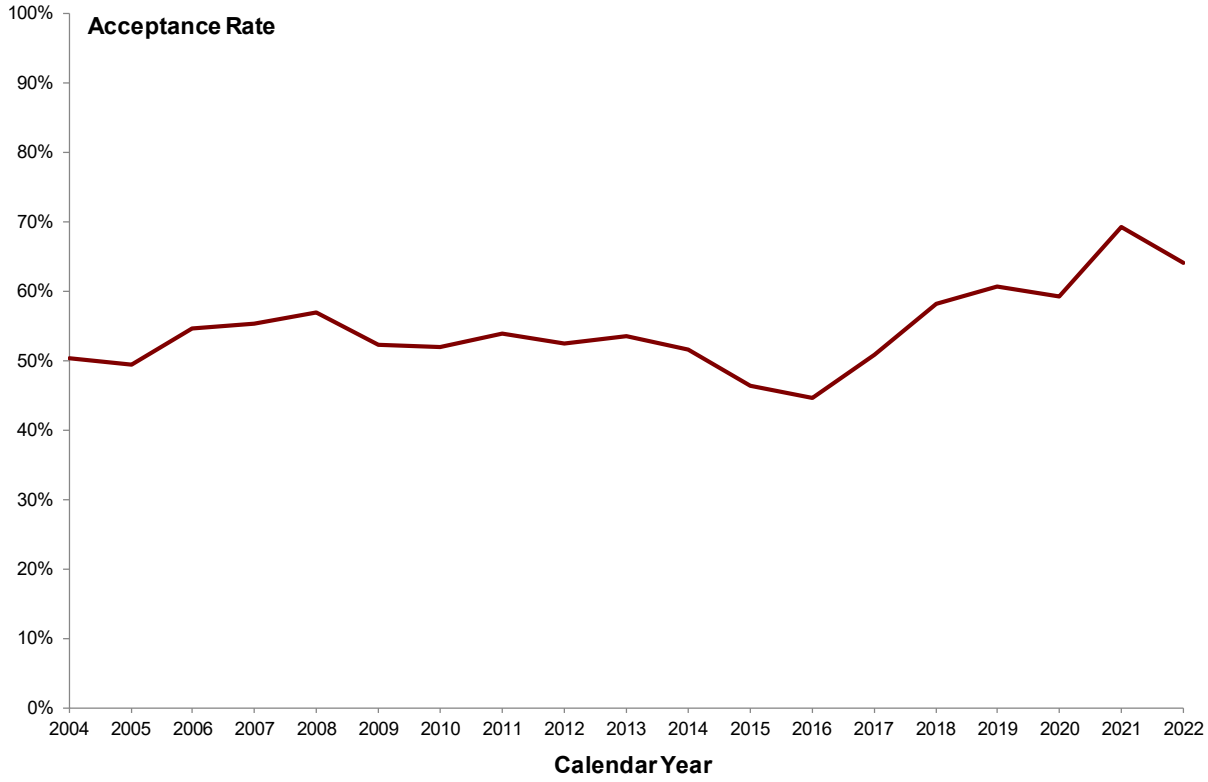
9.2.9 For the current valuation, we have revised our methodology of allowing for the current backlog of claims and processing constraints, both in IL and PI. The revised backlog adjustment consists of two explicit components:

- The first component of the revised approach is an allowance for the existing backlogs in IL and PI. This component is calculated by considering the number of additional claims outstanding on 31 December 2022 and applying various conversion factors to estimate the number of PI payments that will arise as a result of clearing the existing backlogs.
- While the first component of the backlog adjustment accounts for the existing claims backlogs in both IL and PI, a second adjustment is required to account for the impact of current claims processing constraints on the observed experience in setting the assumed future claim rates and projecting future claimant numbers. This is calculated by considering the rate of IL lodgements and applying various conversion factors to estimate the number of PI claims that would have been paid in the absence of claims processing constraints. The actual paid experience is then compared with the theoretical number of permanent impairment claims, and a scale factor is applied to the actual claims curve. This 'ultimate' claims curve is used to project the future rate of PI claims.

9.2.10 To estimate the quantum of the first component of the backlog adjustment, the number of claims awaiting processing and conversion assumptions are required. Based on data to 31 December 2022, there are around 9,000 claimants with IL claims awaiting processing, and 4,000 claimants with PI claims awaiting processing.

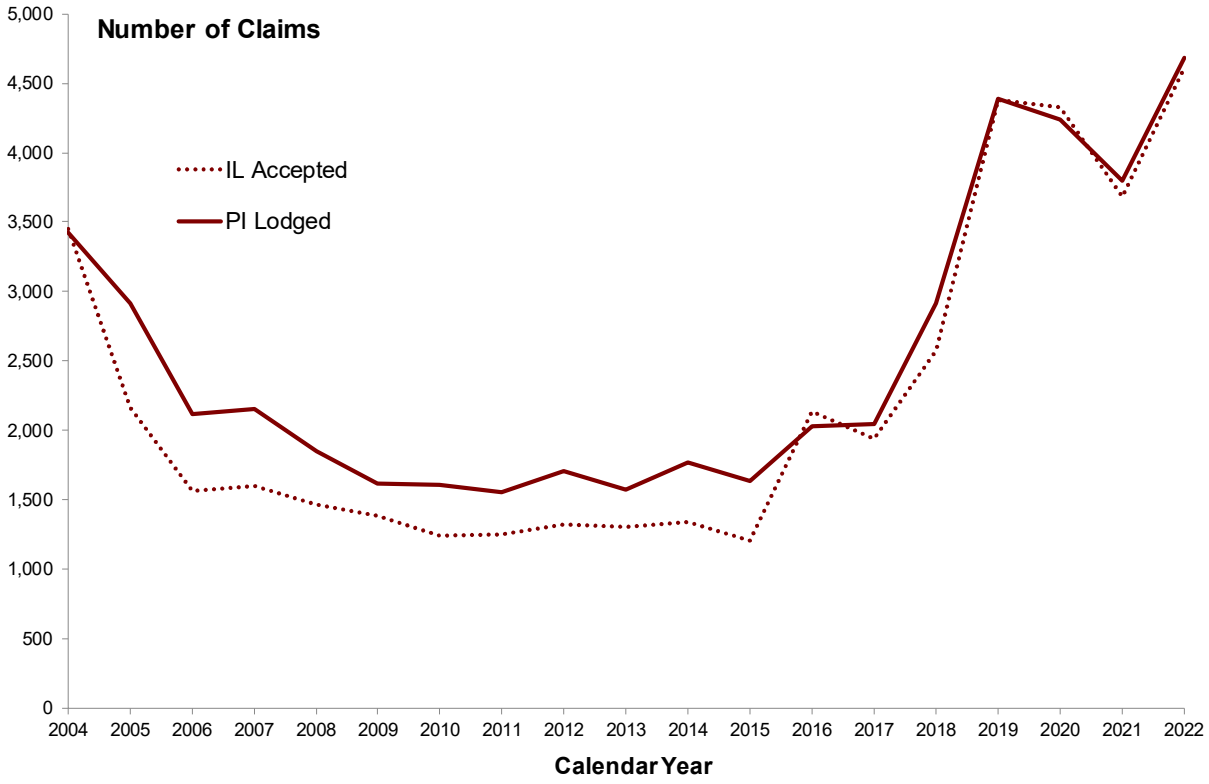
9.2.11 Conversion rates required include IL acceptance, IL acceptance to PI lodgement and PI acceptance. Section 5.3 of the report discussed the conversion rate from IL lodgement to IL acceptance. Figure 9.5 shows the acceptance rates of PI claims since 2004. We have used the average acceptance rates over the last two calendar years, resulting in an assumed PI acceptance rate of 67 per cent.

Figure 9.5: PI Acceptance Rate



9.2.12 Figure 9.6 shows the number of IL claims accepted and the number of PI claims lodged (after withdrawals) by calendar year. Note that it is possible for the number of PI claims to exceed the number of IL claims in a given year, due to potential timing lags and the ability to submit a PI reassessment without an additional IL claim. Nonetheless, IL claims accepted and PI claims lodged have tracked closely, particularly since 2016. As such, we have assumed a conversion rate from accepted IL to lodged PI of 100 per cent.

Figure 9.6: Number of IL Claims Accepted and PI Claims Lodged by Calendar Year



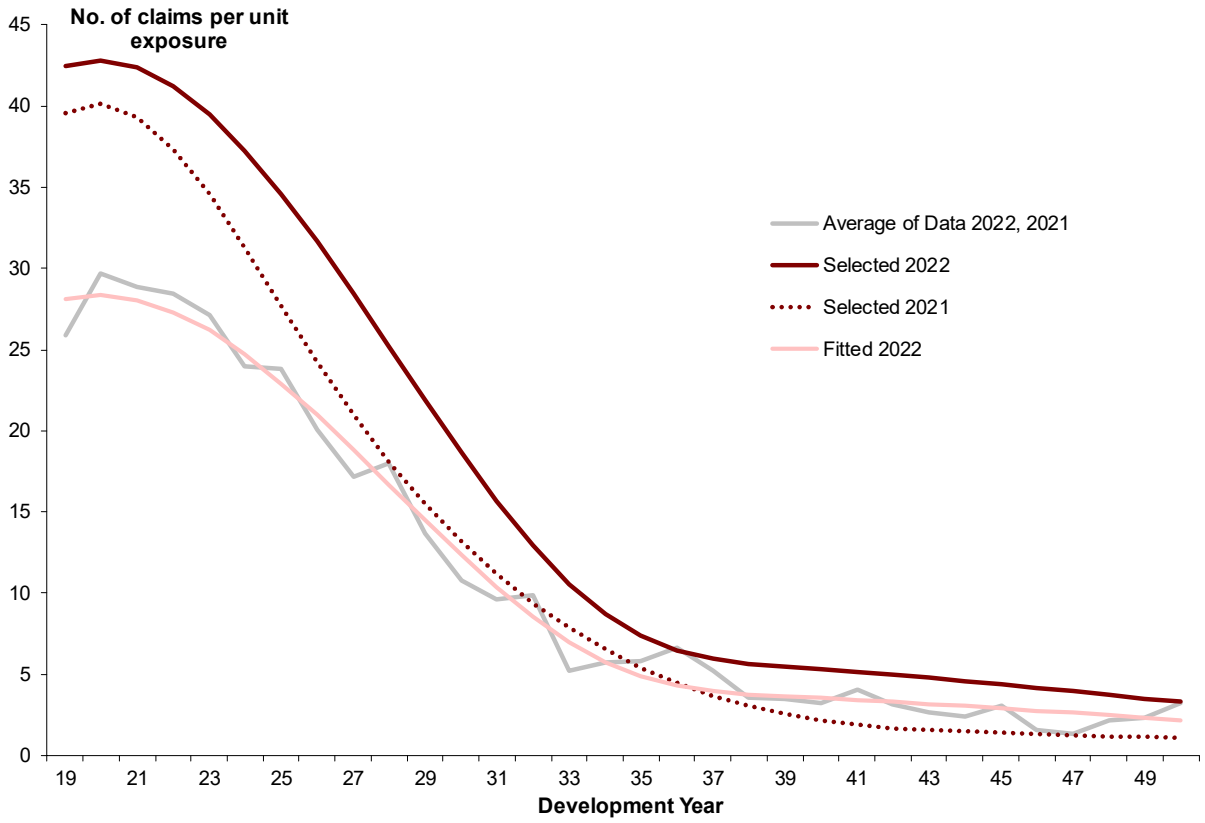
9.2.13 Based on the number of IL and PI claims outstanding as at 31 December 2022 compared with expected levels of claims on hand, and the assumed conversion rates, we have added an additional 4,700 DRCA PI claims to the claimant projection to account for the current IL and PI backlog claims.

9.2.14 The second component of the backlog adjustment accounts for the impact of current processing constraints on the observed experience in setting the assumed future claim rates. The observed claims curve based on paid claims is being supressed by current limitations to processing capacity, and is not representative of expected future claim rates.

9.2.15 We start with the average rate of IL claims over the past two calendar years and apply the assumed conversion rates to calculate the theoretical rate of PI payments over this period. This implied a scale up factor of 51 per cent to be applied to the observed claims curve, which can be decomposed into 15 per cent and 37 per cent due to constraints in PI and IL processing respectively.

9.2.16 Figure 9.7 compares the number of claims per unit of exposure over the two most recent calendar years with the assumptions adopted for the current valuation and the 2021 valuation.

Figure 9.7: Number of Claims per Unit Exposure

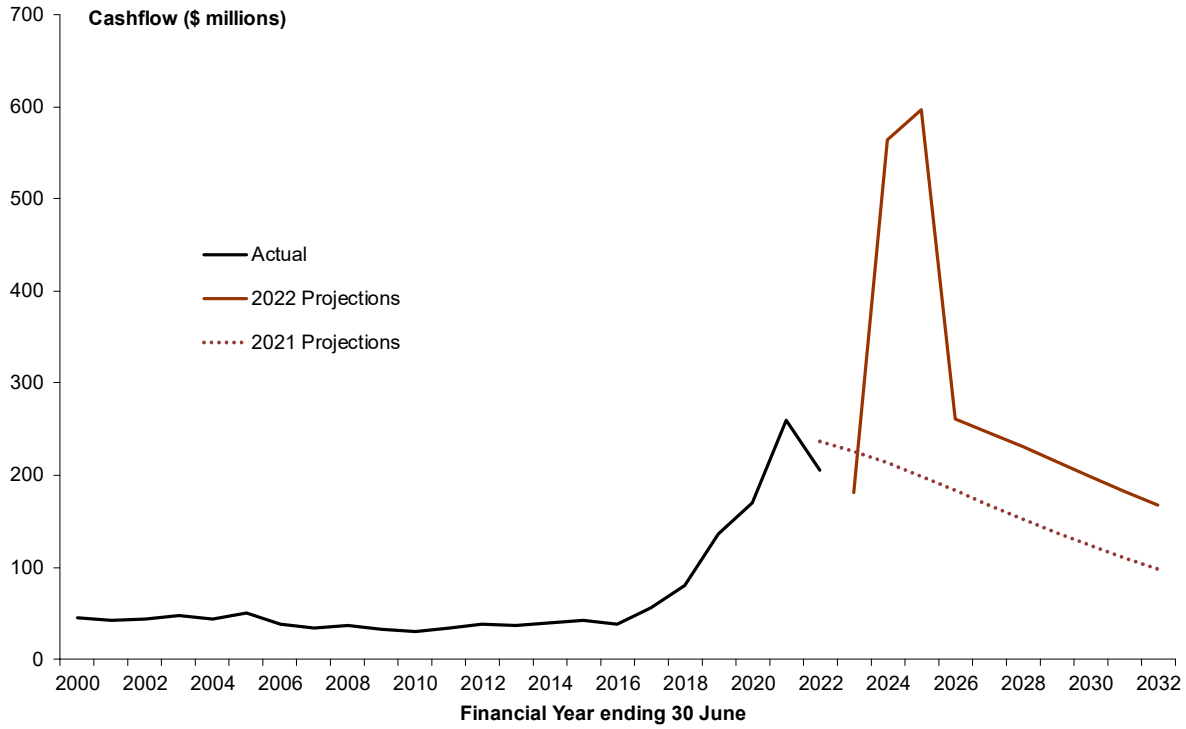


9.2.17 A timing adjustment has been applied to the cashflow projection to reflect current and projected staffing levels within DVA. The adjustment factors applied have been based on DVA's DDFM projections of staffing levels over the short to medium term. This is currently our best source of information regarding future departmental staffing objectives and funding.

9.2.18 It is not possible for us to independently forecast staffing levels within DVA, and as such we have relied on internal modelling and guidance provided by the department. Specifically, we assume claim numbers will continue to be supressed in the 2023 financial year before the impact of recruitment initiatives becomes apparent from 2024 onwards. We expect heightened levels of processing over the 2024 and 2025 financial years in order to clear existing backlogs, which will result in a significant increase in claims paid in these years. Should actual recruitment or retention rates differ to those assumed in DVA's internal modelling, then the timing adjustments applied to the projected cashflows will not eventuate.

9.2.19 Figure 9.8 below shows the historic and projected cashflows for DRCA permanent impairment payments resulting from these assumptions.

Figure 9.8: Historic and projected DRCA permanent impairment payments



9.3 Liability Estimate

9.3.1 Table 9.1 shows the outstanding liability at 30 June 2022 in respect of permanent impairment and non-economic loss claim payments broken down by year of accident. The total estimated liability for DRCA claims is $3,057.9m. The 2021 valuation projected that the DRCA liability as at 30 June 2022 would be $1,651.3m.

Table 9.1: Outstanding claims liability for permanent impairment and non-economic loss claims by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) ($ m)
1979 and before	89.6
1980 – 1984	175.0
1985 – 1989	273.9
1990 – 1994	467.7
1995 – 1999	801.0
2000 – 2004	1,250.8
Total	**3,057.9**
Expected at 30/06/2022	*1,651.3*
Total (30/06/2021)	**1,803.8**

9.3.2 Table 9.2 reconciles the liability estimate with the corresponding estimate at the previous valuation.

Table 9.2: Reconciliation of liability for permanent impairment payments

	$m
Liability estimate at 30/06/21 (previous report)	1,803.8
Assumed Interest	84.3
Projected Payments	(236.8)
Notional Premium	0.0
Projected liability as at 30 June 2022 (previous valuation)	1,651.3
Experience effects and assumption changes	
Difference between actual and projected payments	31.5
Change in claim rate	989.6
Change in average size	(36.4)
Provision of outstanding backlog claims	421.9
Current Estimate	3,057.9

10 Valuing Non-Incapacity Benefits – MRCA Permanent Impairment

10.1 Modelling Approach

10.1.1 Under MRCA, the default entitlement in compensation for a permanent impairment is an income stream which can be converted to an age-related lump sum (reflecting the duration for which the income stream would have been expected to be paid). A small number of MRCA PI payments are being taken as an income stream. We, therefore, model claimants and allow for a proportion of benefits to be paid as an income stream.

10.1.2 The amount of benefit payable depends upon a number of factors:

- the age of the claimant;
- the assessed impairment points;
- the lifestyle rating;
- whether the incident giving rise to the impairment was related to warlike service or not; and
- in the case of Section 80 payments, the number of eligible dependants.

10.1.3 The administrative changes made within DVA have increased the accessibility of services and benefits to the veteran community and policy initiatives such as Veteran Centric Reform have encouraged veterans to claim earlier for DVA benefits and increased awareness of these benefits amongst existing ADF members and the veteran population. This may have a short term effect in bringing forward claimants who may otherwise have claimed for a benefit in later years and captured existing veterans who may have faced barriers to claiming in previous years. The exact impact of these changes will not be known for a number of years and there is currently not enough data to help determine what the magnitude or length of the impact could be.

10.1.4 In projecting future payments, we need to set assumptions on the numbers of claims, the mix of warlike and peacetime service-related claims (with allowance for this to change over time), the severity distribution for each type of claim, the age distribution of claimants and the rate of future growth in payments.

10.1.5 A key uncertainty in determining the level of claims for PI is the level of exposure, that is, the total population of existing veterans and serving ADF personnel who may eventually make a claim. We currently have data relating to the number of active personnel in each year but this encompasses the entire active force. To allow for more nuanced analysis, information regarding the number of people injured and the type of injuries incurred could provide a more robust picture of the exposure as it would provide visibility on the upper limit of claimants likely to arise from a particular accident year.

10.1.6 Claims also arise from the existing population of veterans who may have separated from Defence a number of years ago and where the severity of injuries has increased with time. Improved access to DVA services and greater awareness of benefits might be influencing the propensity of these veterans to make a claim and potentially claiming earlier than they

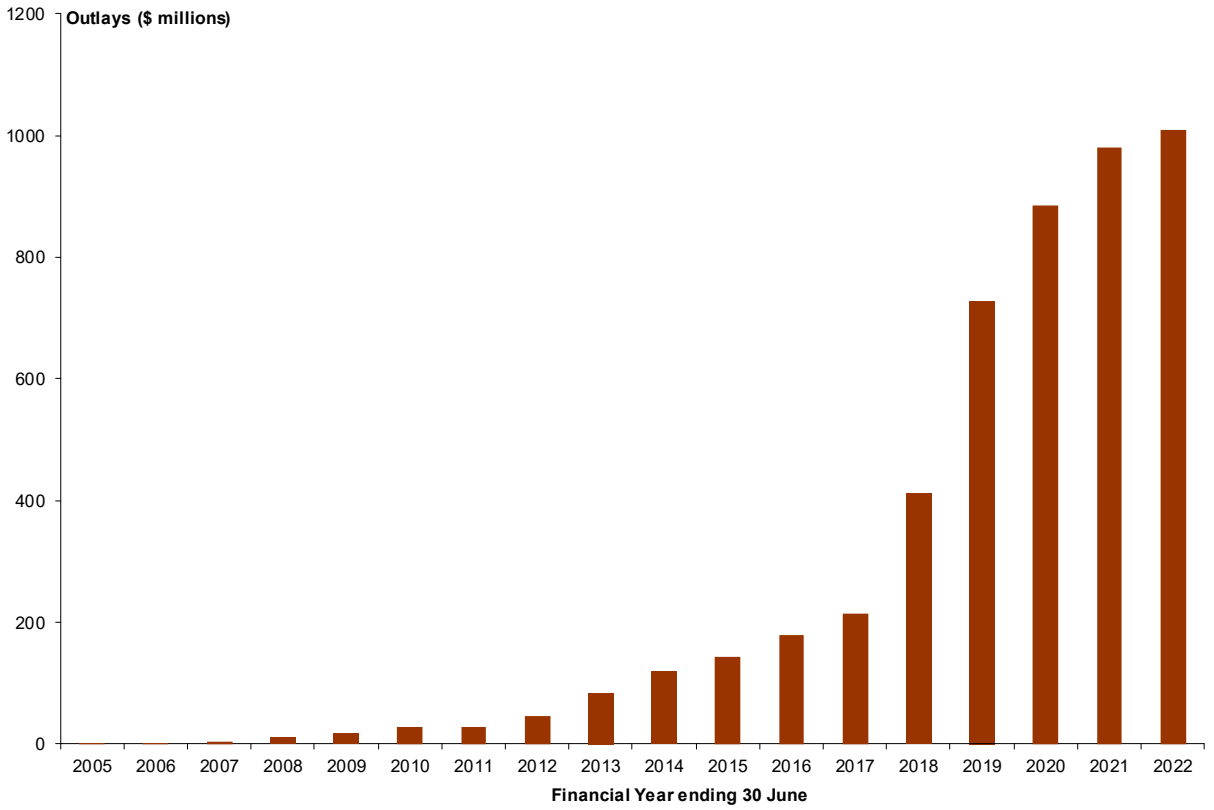
otherwise would have. Information regarding discharges and the likely total veteran population may be useful in helping to narrow the exposure for claimants from the existing veteran population who might make a PI claim in future and provide an upper limit to the number of potential claimants likely to emerge over time from this cohort. We have included additional scenario analysis in section 20 of the report to explore potential outcomes under different exposure scenarios.

10.1.7 As with DRCA PI, we have also revised our methodology for allowing for the current MRCA IL and PI backlogs.

10.2 Recent Experience and Valuation Assumptions

10.2.1 Figure 10.1 shows expenditure on permanent impairment payments since the inception of MRCA. There were virtually no payments in the first two years of operation of the scheme and that, even for the following 5 years, outlays increased only slowly. Nonetheless, outlays have increased year on year, with particularly marked growth occurring since 2017. The recent growth in experience can, in part, be attributed to significant administrative and cultural changes within DVA, which have led to an increase in the number of claimants seeking compensation. Expenditure has continued to grow but not to the same magnitude as seen in previous years, increasing 11 per cent in 2021 and 3 per cent in 2022. Although this suggests some slowing of growth, it does not fully reflect the underlying claims experience as this is more likely a result of limited processing capacity rather than a change in underlying experience.

Figure 10.1: Expenditure on permanent impairment payments



10.2.2 The significant increases in PI outlays have been driven by both an increase in claimant numbers and an increase in the average payment amount. Figure 10.2 shows the number of

claimants by the type of payment while Figure 10.3 shows the average lump sum payment for those electing to receive only a lump sum.

Figure 10.2: Number of MRCA claimants by type of payment

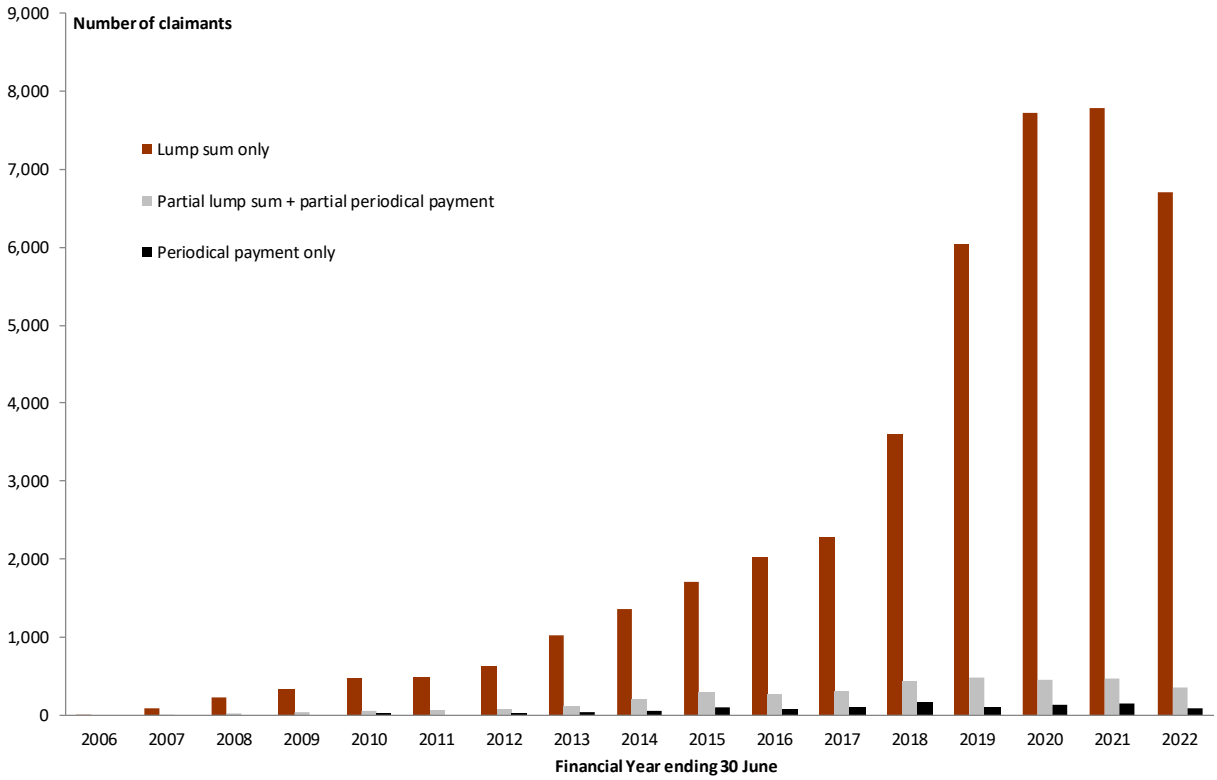
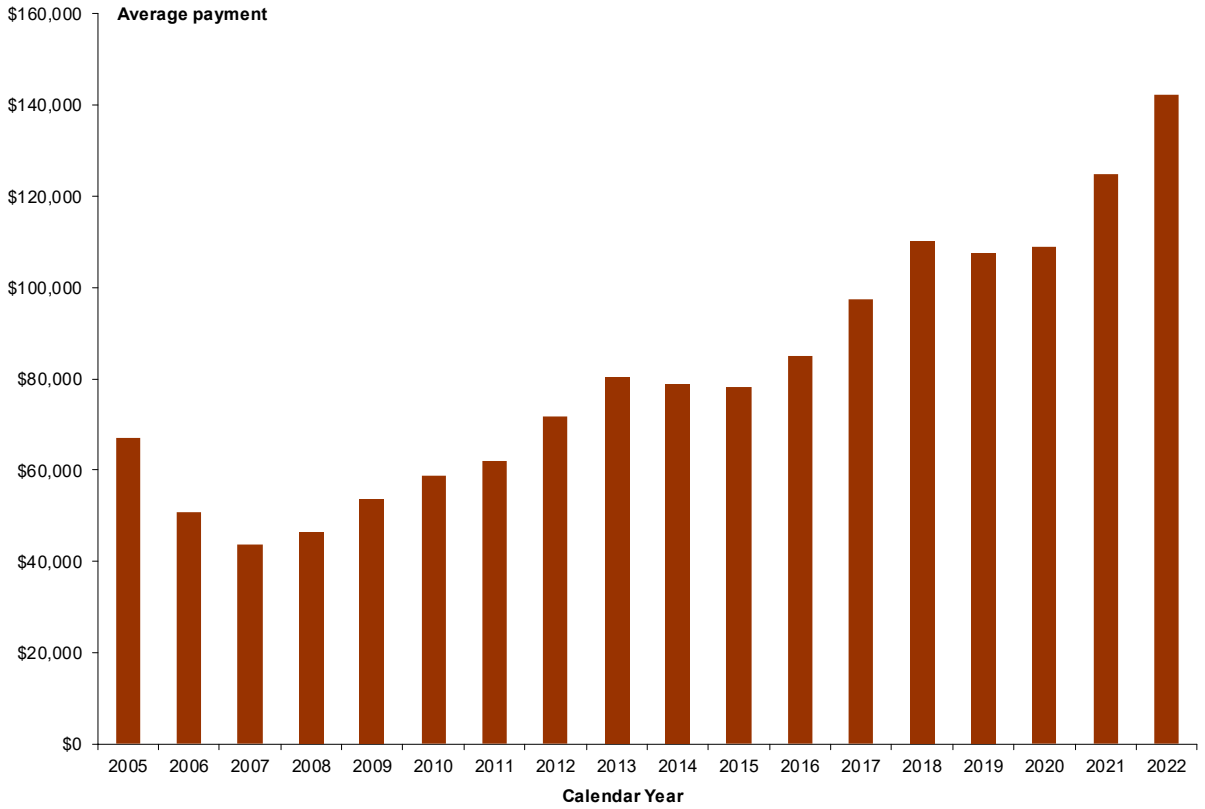


Figure 10.3: Average lump sum payment



10.2.3 There are several factors which may be driving this experience, including policy and cultural changes within the organisation, or an increase in the level of injuries sustained by claimants while at Defence.

10.2.4 Since the previous valuation, the average payment amount has increased substantially. There are a number of factors that may explain this increase. Analysis conducted by DVA shows the number of medically separated veterans has increased. This group is more likely to be severely impaired and tend to have much higher payment amounts. This group is also more likely to be prioritised, which may be distorting the observed experience over the past year. The reason for the increase in the number of medically separated veterans is unknown, and there remains uncertainty as to whether current levels will continue into the future.

10.2.5 Anecdotal evidence suggests that older claims are now being processed. We are aware that if a veteran has lodged multiple conditions for initial liability assessment over a period, the conditions may be bundled and processed at the same time. That is, any additional claims accrued over a period are now being processed at the same time as the first lodged claim and may be contributing to the higher average size observed in recent experience. This suggests that the average size may revert to previous experience once the backlog has been cleared and processing capacity is commensurate with lodgements.

10.2.6 We have looked at the severity distributions for warlike and peacetime service by individual impairment point ratings. Over the past year, there has been a shift in the distribution of impairment points for both warlike/non-warlike and peacetime claims towards higher levels of impairment, consistent with the increase in the observed average size. In previous years, we have used the most recent 3 years of experience to set the severity distributions. **Error! Reference source not found.**Figure 10.4 shows the raw and fitted rates for warlike service

and Figure 10.5 shows the corresponding figures for peacetime service. For the current valuation, we have used the most recent calendar year of experience to fit the impairment point distributions, placing full credibility on the most recent experience. We note however that there remains a possibility that the average size could revert to lower levels once the current backlog has been cleared.

10.2.7 There are noticeable peaks in the distribution which may be related to benefit eligibility. There is a noticeable peak at 5 impairment points, the minimum number of points required to receive a PI payment. A pronounced peak is also seen at 51 impairment points. Achieving an assessment of at least 50 impairment points brings with it a number of benefits; notably access to the Gold Card (which covers all health care costs, not just those related to the compensable injury), entitlement to the Special Rate Disability Pension and reimbursement of expenses for financial and legal advice to assist in making a choice between receiving PI compensation in the form of a lump sum or continuing periodic payments.

10.2.8 However, it is important to note that the impairments points shown below are incremental impairment points received and not representative of overall impairment points. With the increasing number of veterans receiving multiple PI assessments, this needs to be borne in mind when assessing trends in the impairment distributions.

Figure 10.4: Distribution of claim severity for warlike/non-warlike claims

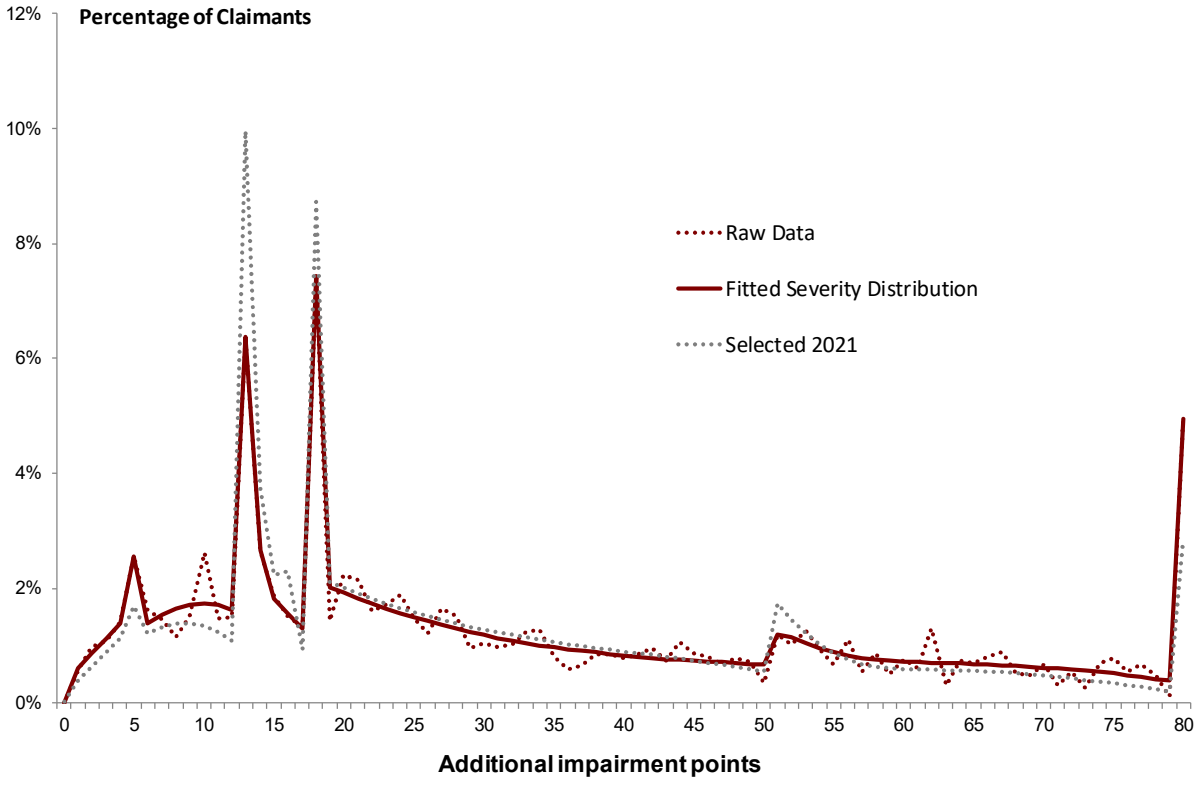
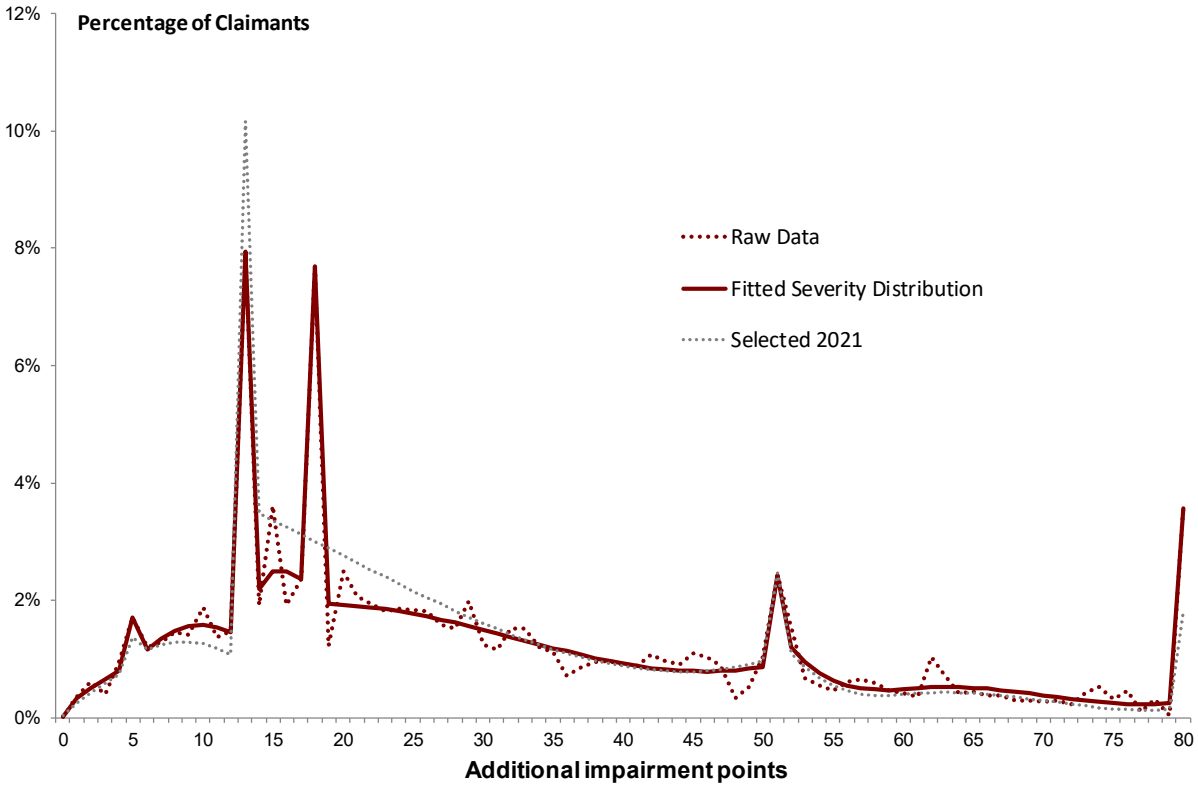


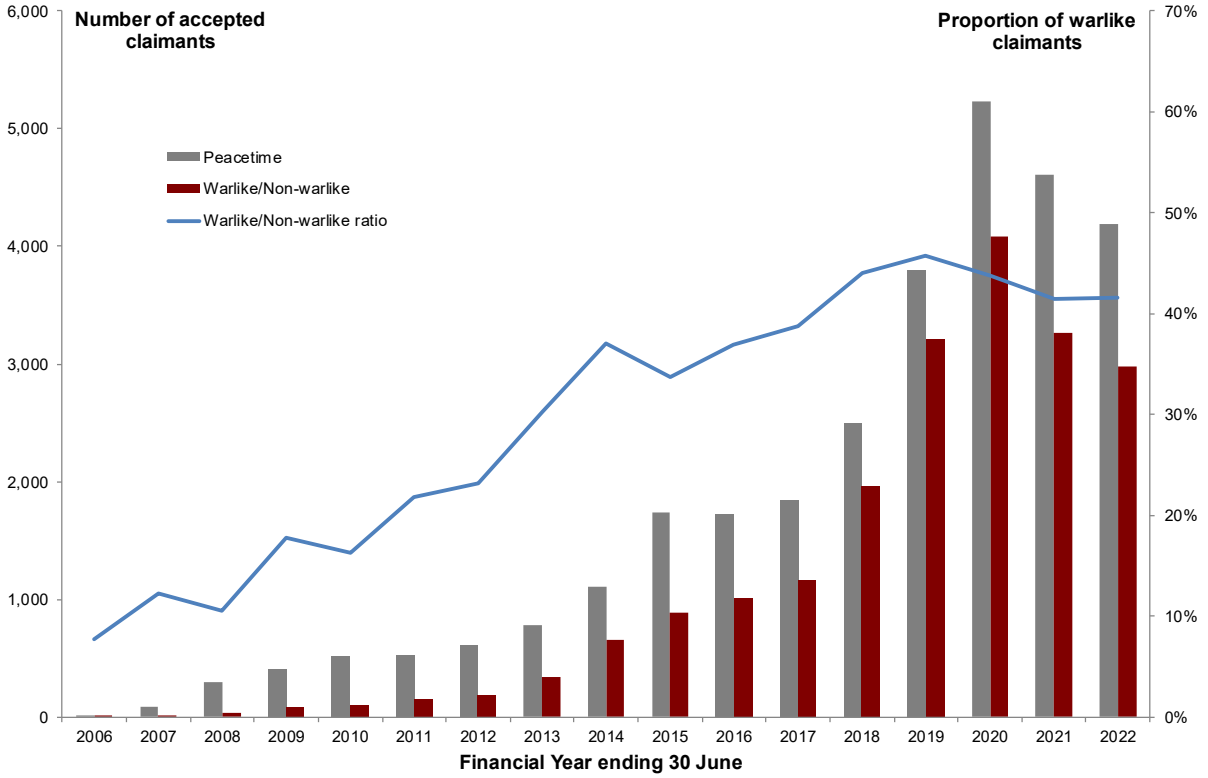
Figure 10.5: Distribution of claim severity for peacetime claims



10.2.9 Veterans can also receive an additional lump-sum payment under MRCA if they are severely impaired and have dependents. This additional Section 80 payment is available to veterans who have been assessed at 80 or more impairment points and have been paid or entitled to be paid compensation under permanent impairment. The additional payment is payable for each eligible young person that depends on the veteran for economic support at the assessment date. The increase in severely impaired veterans seeking compensation has increased the number of Section 80 payments. As such, we have increased the Section 80 loading to reflect the most recent experience.

10.2.10 While the number of both types of claims has grown substantially over the period since 2011, growth has been greater for claims associated with warlike service. The proportion of warlike claims has steadily increased since the inception of MRCA. Claims arising from warlike service typically involve higher payments not just because the factors applying for a particular severity level are higher under the legislation. More recently however, the proportion of warlike claims appears to have stabilised. Note that in most cases it is not possible to unambiguously identify whether a claim is related to warlike or peacetime service. We have assumed warlike service if a claimant sustains injuries during both wartime and peacetime service. This approach was adopted to be consistent with the holistic injury assessment model used in the PI claims process. Figure 10.6 shows the number of recipients by nature of service over time.

Figure 10.6: Number of recipients by nature of service

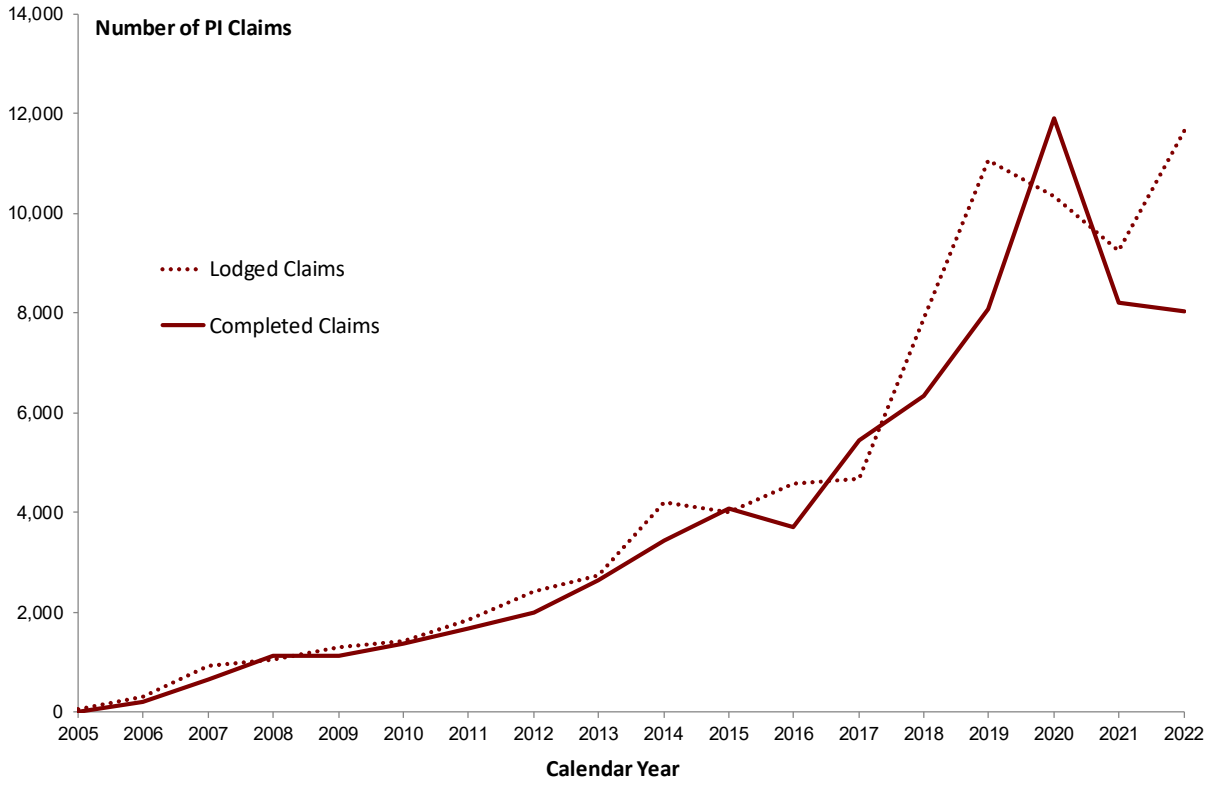


10.2.11 In projecting future payments, we need to set assumptions on the numbers of claims, the mix of warlike and peacetime service related claims (with allowance for this to change over time), the severity distribution for each type of claim, the age distribution of claimants and the rate of future growth in payments.

10.2.12 The backlogs in both IL and PI persist and continue to distort the observed payment experience. Although the increase in the rate of initial liability claims lodged has stabilised over the past few years, it is clear that there remains a large number of unprocessed MRCA IL claims which have accumulated due to ongoing limitations in processing capacity.

10.2.13 PI claims lodged has increased over the past 12 months, although this is likely a direct result of the increase in IL claims completed during this time. Despite the increase in PI claims lodged over the year, the number of claims completed remained well below the rate of lodgements. The PI backlog has continued to grow since the previous valuation, and will likely increase over the short to medium term as the backlog of IL claims is cleared. Figure 10.7 below shows the number of lodged and completed PI claims by calendar year.

Figure 10.7: Lodged and Completed PI Claims



10.2.14 Similar to DRCA PI, we have revised our methodology of allowing for the current backlog of claims and processing constraints in IL and PI. The revised backlog adjustment consists of two explicit components:

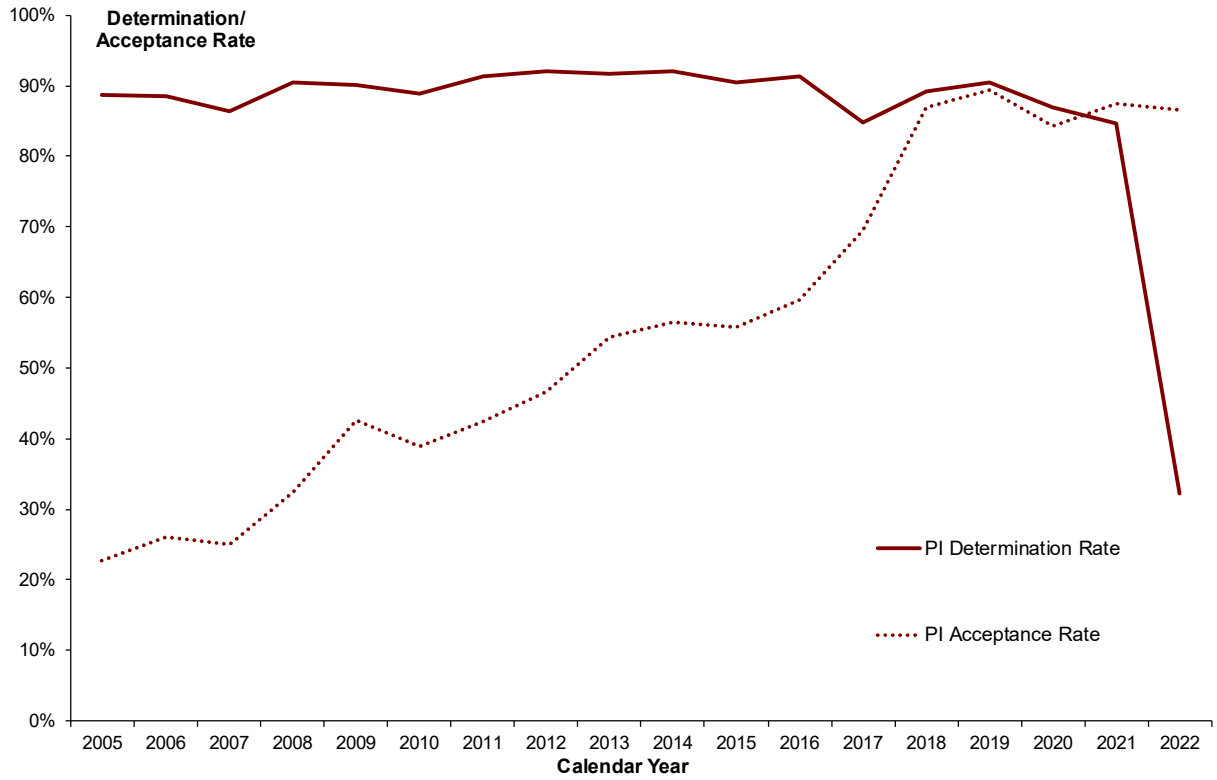
- The first component of the revised approach is an allowance for the existing IL and PI backlogs. This component is calculated by considering the number of claims outstanding at 31 December 2022 and applying various conversion factors to estimate the number of PI payments that will arise as a result of clearing the existing backlogs.
- The second component of the adjustment accounts for the impact of current claims processing constraints on the observed experience in setting the assumed future claim rates and projecting future claimant numbers. This is calculated by considering the rate of IL lodgements and applying various conversion factors to estimate the number of PI claims that would have been paid in the absence of claims processing constraints. The actual paid experience is then compared with the theoretical number of PI claims, and a scale factor is applied to the actual claims curve. This 'ultimate' claims curve is used to project the future rate of PI claims.

10.2.15 To estimate the quantum of the first component of the backlog adjustment, the number of claims awaiting processing and conversion assumptions are required. Based on data to 31 December 2022, there are around 25,000 claimants with IL claims awaiting processing, and 9,000 claimants with PI claims awaiting processing.

10.2.16 Conversion rates required include IL acceptance, IL acceptance to PI lodgement and PI acceptance. Section 5.3 of the report discussed the conversion rate from IL lodgement to IL acceptance. Figure 10.8 below shows the determination and acceptance rates for PI claims since 2004. We have used experience over the last 2 calendar years in setting the acceptance rate, resulting in an assumed permanent impairment acceptance rate 87 per cent. We have

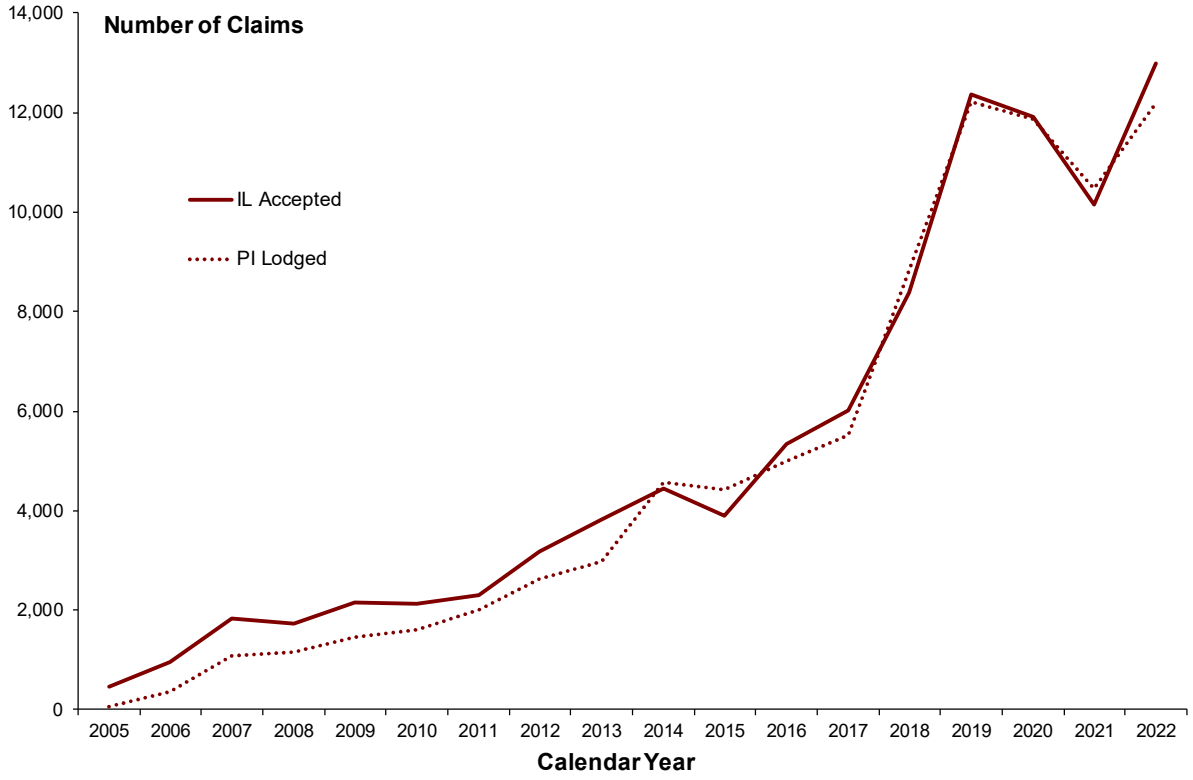
used experience over a longer period to set the determination rate of 85 per cent to account for maturity in the experience.

Figure 10.8: PI Determination and Acceptance Rates



10.2.17 Figure 10.9 shows the number of initial liability claims accepted and the number of permanent impairment claims lodged (before withdrawals) by calendar year. Note that it is possible for the number of PI claims to exceed the number of IL claims in a given year, due to potential timing lags and the ability to submit a PI reassessment without an additional IL claim. Nonetheless, IL claims accepted and PI claims lodged have tracked closely. As such, we have assumed a conversion rate from accepted IL to lodged PI of 95 per cent.

Figure 10.9: IL Claims Accepted and PI Claims Lodged by Calendar year



10.2.18 We note that there is considerable uncertainty surrounding the transition of IL claims into PI claims. Under the MRCA scheme, claims are assessed on a whole person injury basis. As such, where a veteran has multiple injuries and multiple claims, it is not possible to determine which of the injuries led to a specific PI claim.

10.2.19 Based on the number of IL and PI claims outstanding as at 31 December 2022 compared with expected levels of claims on hand, and the assumed conversion rates, we have included an additional 16,000 MRCA PI claims to the claimant projection to account for the current IL and PI backlog claims.

10.2.20 The second component of the backlog adjustment accounts for the impact of current processing constraints on the observed experience in setting the assumed future claim rates. The observed claims curve based on paid claims is being supressed due to current limitations to processing capacity, and is not representative of future claim rates.

10.2.21 This year, we have revised our methodology and instead adopted a 'top down' approach, starting with the observed rate of initial liability lodgements and applied various conversion factors to estimate the number of permanent impairment claims that would have been paid in the absence of any processing constraints. The actual paid experience is then compared with the theoretical number of permanent impairment claims, and a scaling factor is applied to the actual claims curve. This 'ultimate' claims curve is used to project the future rate of permanent impairment claims.

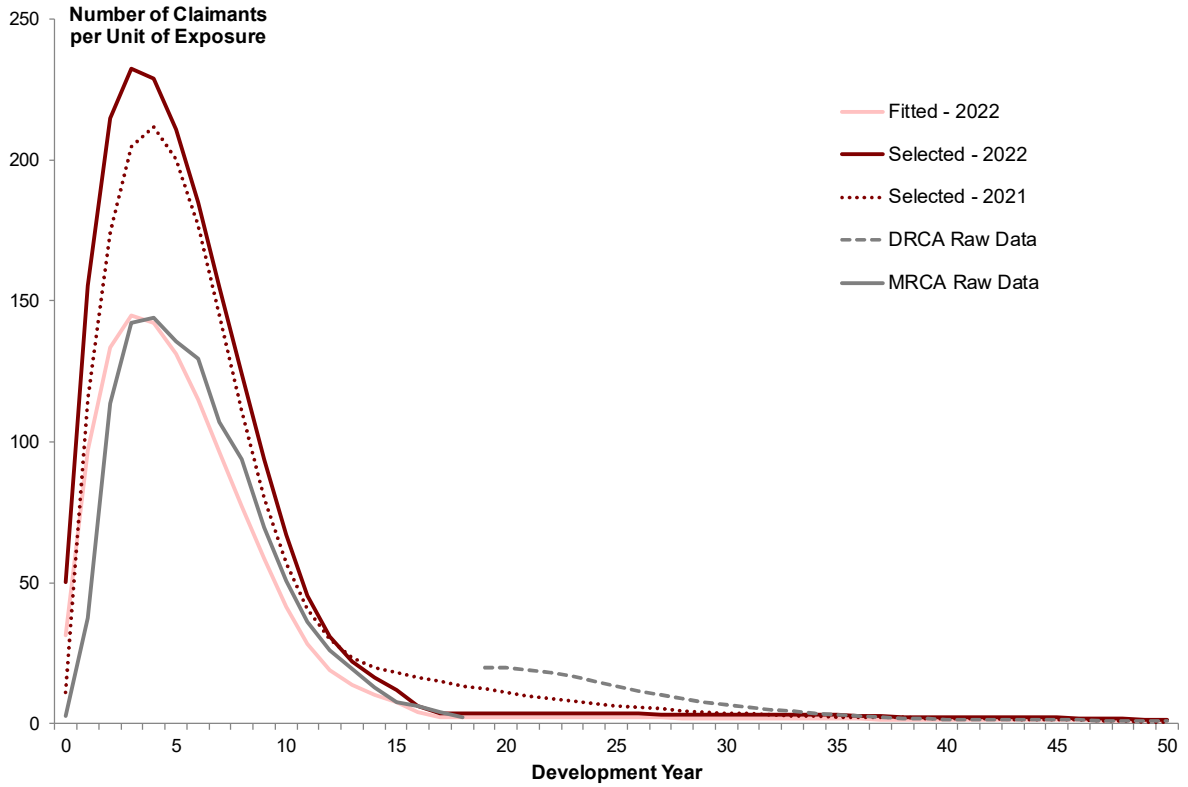
10.2.22 We start with the average rate of IL claims over the past two calendar years and apply the assumed conversion rates to calculate the theoretical rate of PI payments over this period. This implies a scale up factor of 61 per cent to be applied to the actual claims curve, which can be decomposed into 25 per cent and 35 per cent due to constraints in PI and IL processing

constraints respectively. This reflects the claims rate had processing capacity met both the level of lodged PI and initial liability claims over recent years.

10.2.23 Figure 10.10 compares the number of claims per unit of exposure over the two most recent calendar years with the assumptions adopted for the current valuation and the 2021 valuation. In setting assumptions for MRCA, we have historically based the claim rates for the early development years on the MRCA experience and blended this into rates derived from DRCA experience for the longer development years. We have continued to rely on DRCA experience for development periods where none is available for MRCA. There is continuing evidence that the MRCA PI experience is markedly different from the DRCA experience prior to closure. As in 2021, we have continued to give more credibility to the MRCA data in setting assumptions.

10.2.24 In selecting the 2022 fitted curve shown in Figure 10.10, we have applied a timing adjustment to the shape of the claims curve. Over the past few years, we have observed that the backlog is distorting the shape of the claims curve, as claims are coming through later than they otherwise would in the absence of processing constraints. The adjustment is based on time to completion parameters for IL and PI claims provided by DVA. The scale up factor of 61 per cent is then applied to this curve to derive the selected claims curve shown in Figure 10.10.

Figure 10.10: Assumed number of claimants per unit of exposure



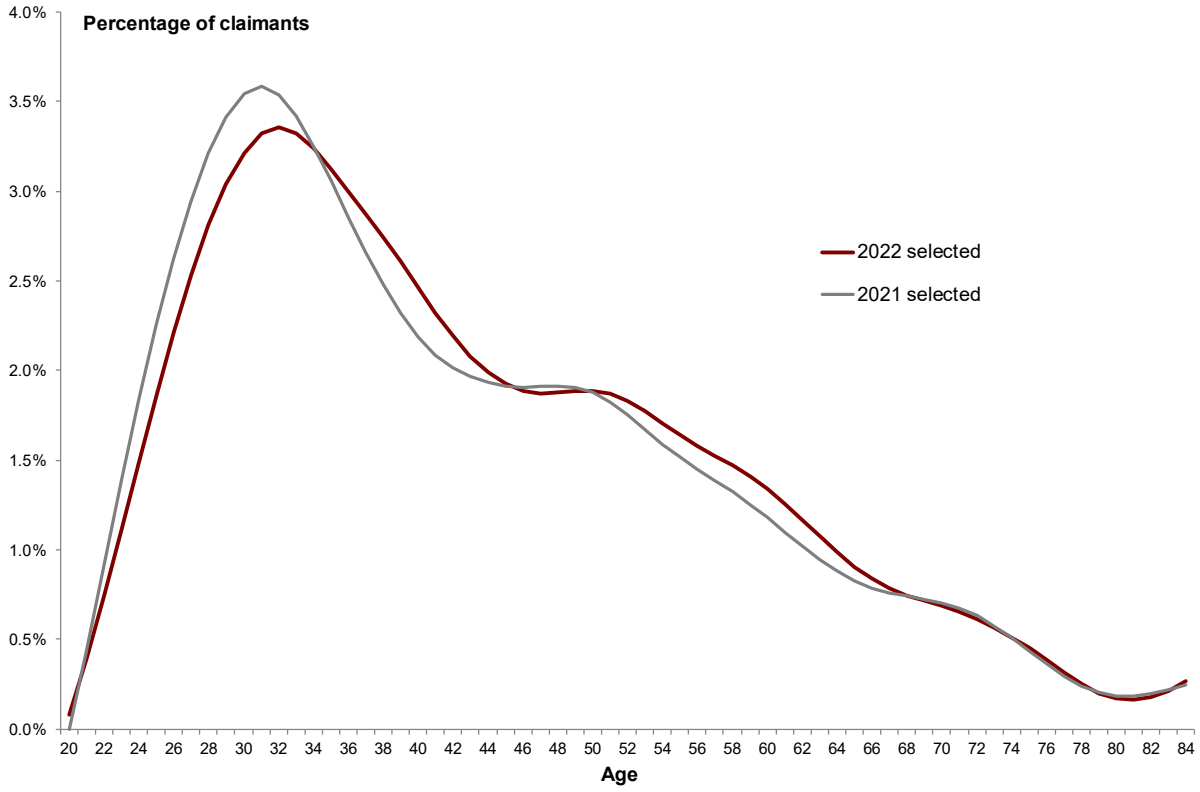
10.2.25 As in the previous valuation, we have used data from the case file for initial liability claims to approximate the mix of claims by accident year. This is intended to account for period-specific changes in operational tempo.

10.2.26 We have assumed that the proportion of warlike claims will reach a maximum in the 2022–23 payment year before declining. This might appear inconsistent with the reduced deployment opportunities since 2013–14, but it needs to be remembered that conditions may be reported

some time after the events which gave rise to the condition. Furthermore, there are a range of on-going operations which have been determined to be warlike or non-warlike for the purposes of determining entitlements under MRCA. It is thus possible that the proportion could be sustained at a higher level for an extended period, if not indefinitely.

10.2.27 At present, MRCA claimants are significantly younger than their DRCA counterparts. Over time, it could be expected that there will be an increase in the proportion of older claimants and a corresponding decrease in the proportion of younger claimants. In order to model what this longer term profile might look like, we looked at combined MRCA and DRCA experience. The age distribution derived from this combined experience was used as the long-term distribution to which MRCA would trend over the next 15 years. Figure 10.11 below shows the selected distribution in 2022.

Figure 10.11: Ultimate age distribution of PI claimants

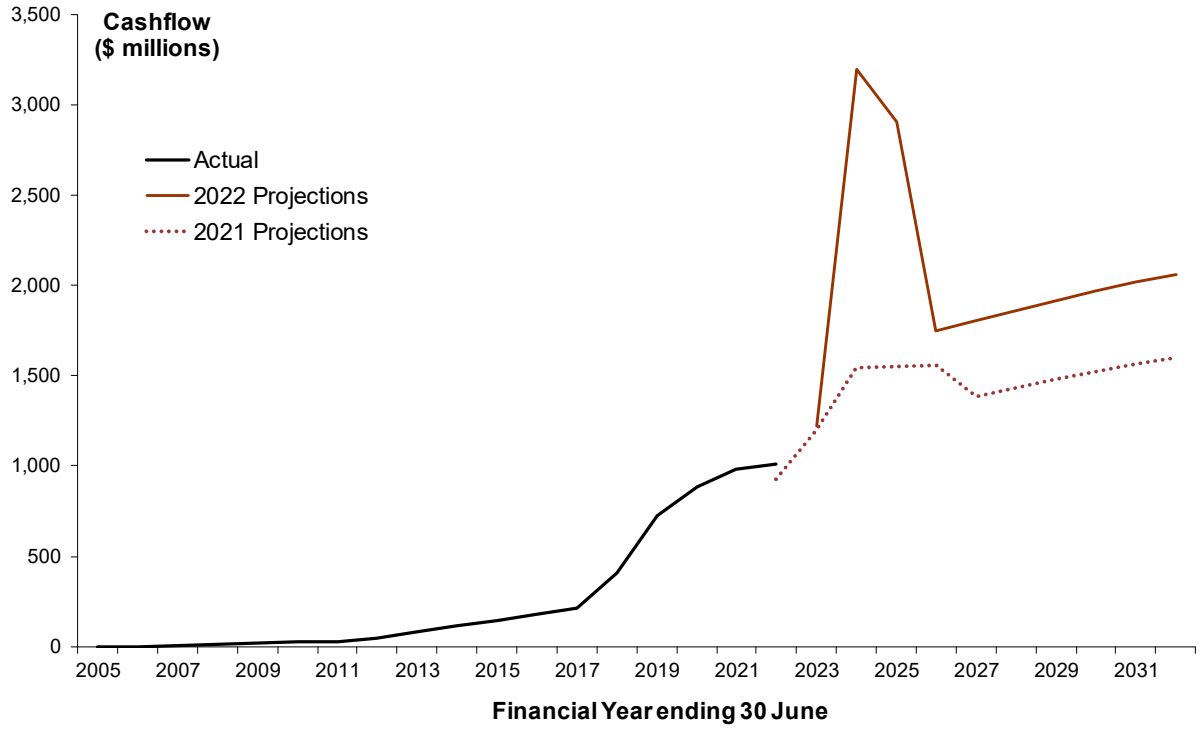


10.2.28 Under MRCA, rates of payment for permanent impairment at a given level of impairment are indexed in line with the CPI. We have assumed that the underlying payment rates to which the severity distributions will apply will increase by 2.5 per cent per annum, that is, the midpoint of the Reserve Bank of Australia target range for inflation. This is the same as the rate assumed in the 2021 valuation.

10.2.29 Figure 10.12 shows the historical and projected cashflows for MRCA permanent impairment payments generated by these assumptions. We note that the level of future cashflows will be influenced by the level of processing capacity available and the level of future claims experience. As with DRCA PI, a timing adjustment has been applied to the cashflow projection to reflect current and projected staffing levels within DVA. These factors assume increased processing capacity will eventuate and are based on DVA's internal DDFM

10.2.30 It is not possible for us to independently forecast staffing levels within DVA, and as such we have relied on internal modelling and guidance provided by the department. Specifically, we assume claim numbers will continue to be supressed in the 2023 financial year before the impact of recruitment initiatives becomes apparent from 2024 onwards. We expect heightened levels of payments over the 2024–25 and 2025–26 years as the backlog is cleared, before payments return to expected baseline levels. Should actual recruitment or retention rates differ to those assumed in DVA's internal modelling, then the timing adjustments applied to the projected cashflows will not eventuate.

Figure 10.12: Historic and projected MRCA permanent impairment payments



10.3 Liability Estimate

10.3.1 Table 10.1 shows the outstanding liability at 30 June 2022 in respect of permanent impairment claim payments broken down by year of accident.

Table 10.1: Outstanding claims liability for permanent impairment claims by year of accident

Year of accident year ending 30 June	Liability ($ m)
2005	54.2
2006	54.1
2007	58.0
2008	69.2
2009	90.3
2010	117.5
2011	153.4
2012	197.8
2013	258.9
2014	356.4
2015	487.9
2016	655.3
2017	847.2
2018	1,051.1
2019	1,267.9
2020	1,479.4
2021	1,672.1
2022	1,747.8
Total	**10,618.5**
Expected at 30/06/2022	*7,876.8*
Total (30/06/2021)	**7,351.3**

10.3.2 The 2021 review projected that the MRCA liability as at 30 June 2022 would be $7,876.8m. The current estimate is $10,618.5m. Table 10.2 reconciles the liability estimate for PI payments with the corresponding estimate at the previous valuation.

Table 10.2: Reconciliation of liability for permanent impairment payments

	$m
Liability estimate at 30/06/21 (previous report)	**7,351.3**
Assumed Interest	371.4
Projected Payments	(925.7)
Notional Premium	1,079.8
Projected liability as at 30 June 2022 (previous valuation)	**7,876.8**
Experience effects and assumption changes	
difference in actual and projected payments	84.5
experience change	47.6
change in claims rate	(105.3)
change in age and gender distributions	(51.2)
provision of outstanding backlog claims	898.4
change in average size	922.8
change in section 80 loading	944.9
Current Estimate	**10,618.5**

11 Valuing Non-Incapacity Benefits – DRCA Medical Costs

11.1 Modelling Approach

11.1.1 Serving ADF personnel are entitled to medical treatment provided by ADF health services. Thus, DVA typically only becomes involved in providing medical services at the time an individual is discharged. An exception applies for reservists whose health care costs related to a compensable injury will be covered by DVA. For non-reservists, however, the existence of a medical expenditure transaction indicates that the individual concerned has been discharged. Given this feature, it is reasonable to conclude that all future costs in relation to medical services for non-reservists have been accrued at the time the first transaction arises.

11.1.2 For DRCA, by definition, all incidents giving rise to medical expenditure have already occurred. Accident dates after the closure of DRCA can occasionally be present in the data. This tends to occur where a specific date cannot be determined and instead the date of diagnosis is recorded. In reality, however, to be compensable the condition must have been caused by ADF service, which, in turn, must have occurred prior to 1 July 2004 for a DRCA claim. To account for this, we exclude active claims with a reported year of accident after 30 June 2004 from this analysis and adjust the results to allow for the additional cashflows arising from this group.

11.1.3 Note that, as in 2021, we have not included those receiving only pharmaceutical benefits in the claimant population, but instead applied a loading to projected non-pharmaceutical cashflows in line with the historical relationship between the two components of expenditure. For the current review, a loading of 25 per cent has been applied. This is consistent with actual experience over the past two calendar years, and is unchanged from the 2021 valuation.

11.1.4 For all medical payments under DRCA, we have retained the approach used for the past 5 years, which models the number of active claimants by accident year by applying a rate of attrition to the current number of active claimants. We explicitly allow for mortality by applying age-based mortality rates to the active population aged 75 or more.

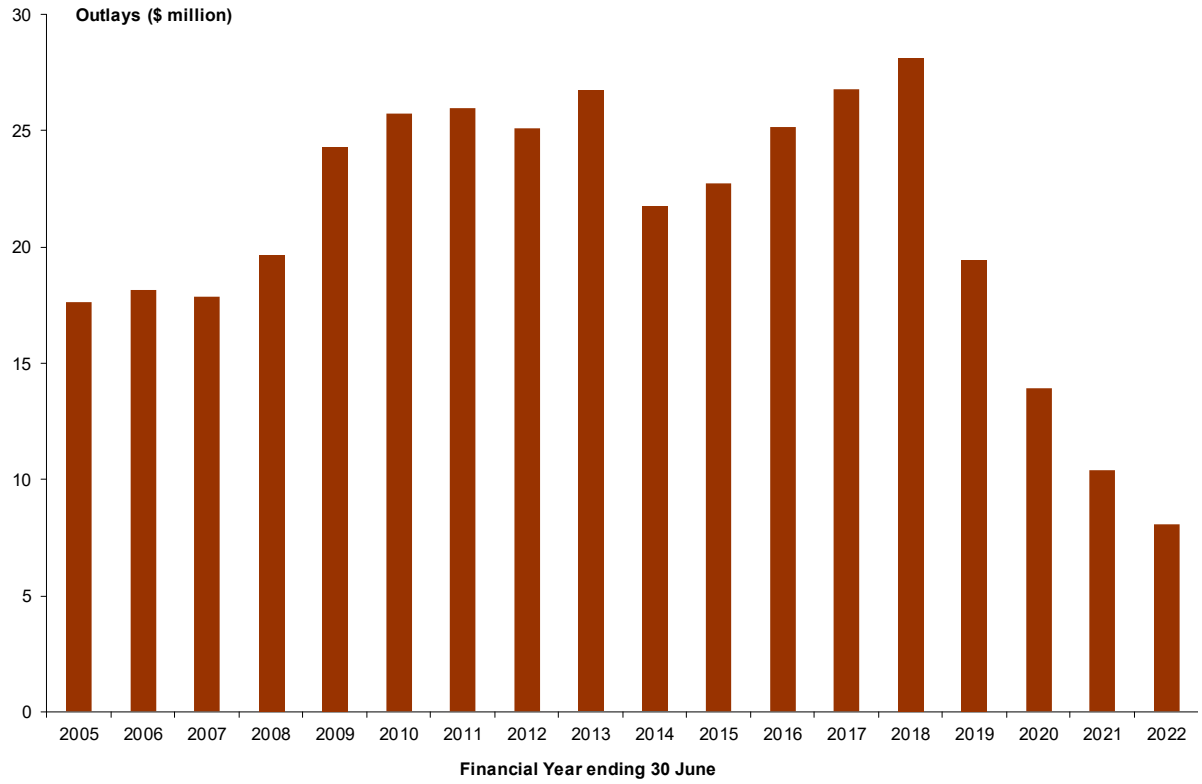
11.1.5 The experience is now being perceptibly affected by the introduction of health care cards for DRCA claimants and the hierarchy which exists in relation to these cards. Specifically, where a client has been issued with a health card and has entitlements under both DRCA and MRCA, any medical expenditure will become a liability under MRCA and the individual will not appear as an active DRCA claimant. This has no effect on the earlier cohorts since they will have completed their service well before the transition to MRCA. For later cohorts, however, there are significant numbers of claimants with an entitlement under both schemes and the sharp drop-off observed for the more recent cohorts may reflect the fact that such claimants are being classified as MRCA recipients.

11.1.6 We have not attempted to model this transition between schemes and this will lead to some outlays which we project as occurring under DRCA actually being made under MRCA. It is therefore important to consider the outcomes for this head of damage in aggregate across both schemes.

11.2 Recent Experience and Valuation Assumptions

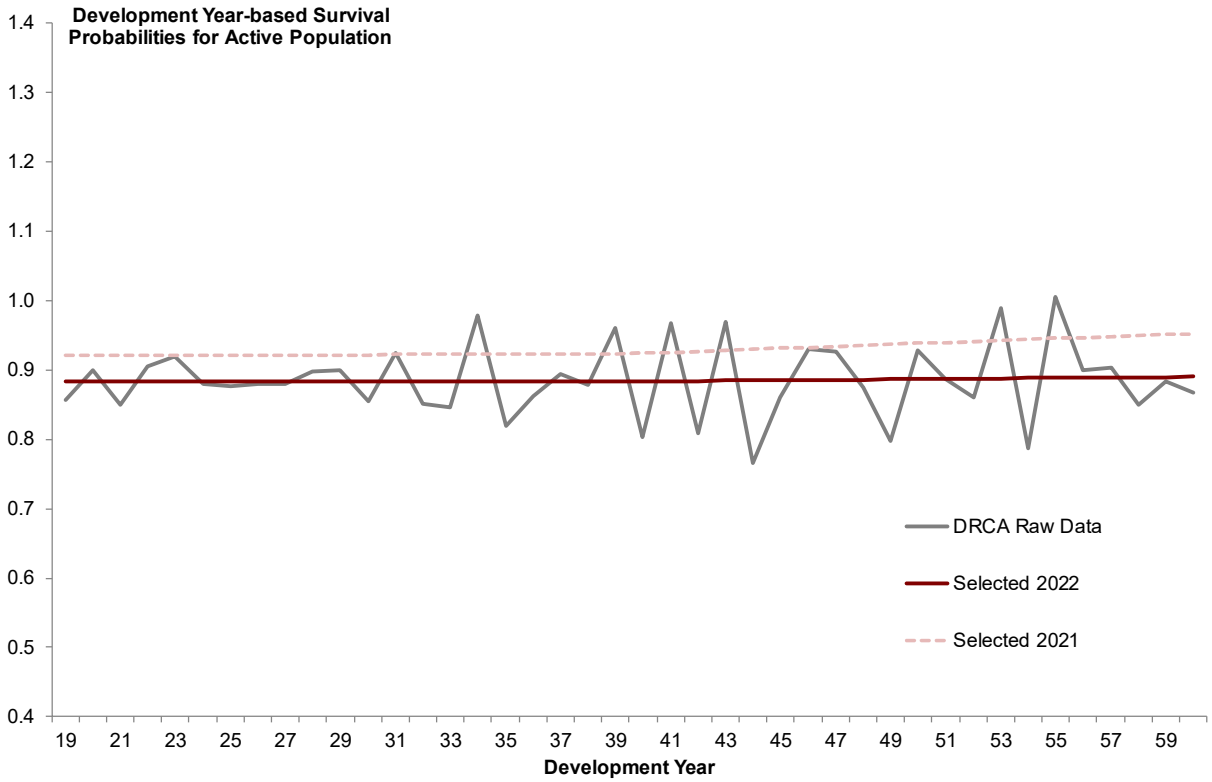
11.2.1 Figure 11.1 shows the annual expenditure on DRCA medical payments over recent years. It can be seen that, after a period of growth, annual expenditure stabilised at around $25m in 2010. This stability in experience was disrupted by the introduction of health care cards for DRCA claimants in 2013 and the associated transition of medical expenses to MRCA for those with claims under both Acts. There was an immediate decline in DRCA outlays in 2013–14, however outlays increased over the next 4 years, reaching the highest point of $28m in 2017–18. The effect of the policy change appears to materialise thereafter, with outlays declining since, reaching its lowest of $8m in the latest financial year.

Figure 11.1: Expenditure on DRCA medical payments



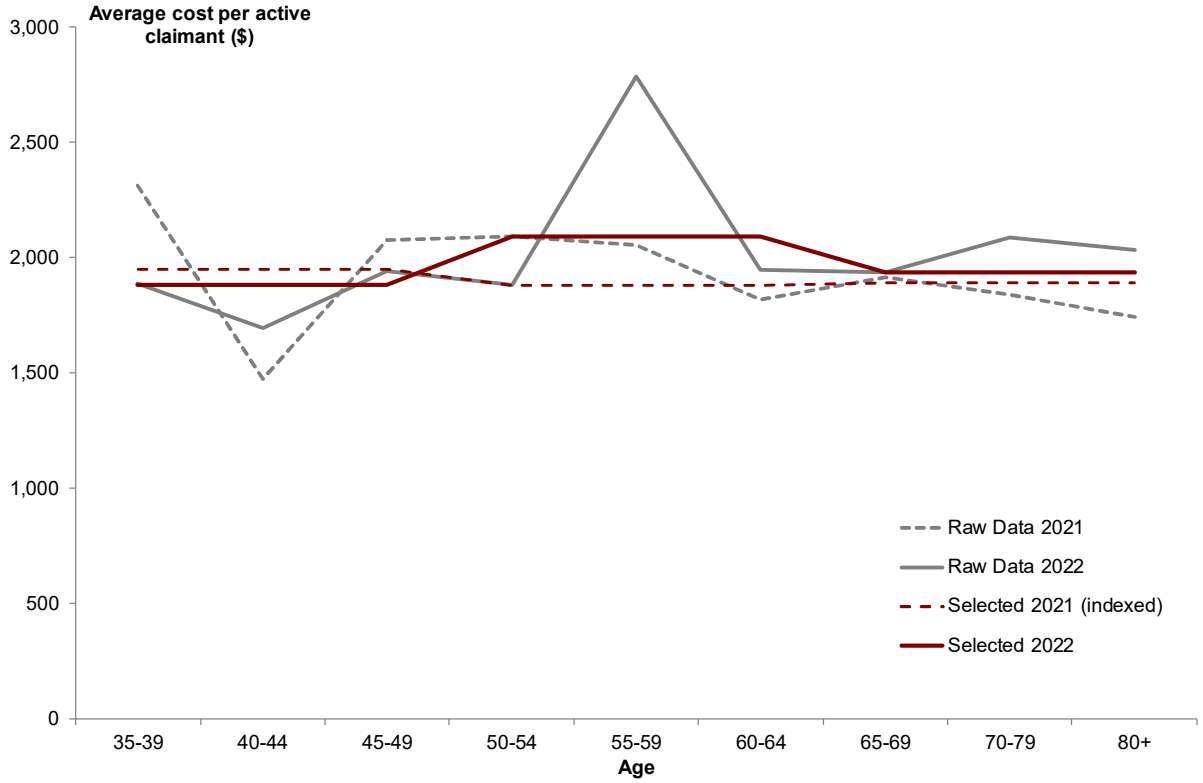
11.2.2 To project the number of active claimants, we apply a rate of attrition to the current number of active claims. We use development year-based attrition rates based on DRCA experience until age 75 with any subsequent attrition being the result of mortality. The intuition behind this assumption is that the entitlement for coverage of medical costs associated with a compensable condition continues for life and as such we expect limited non-mortality decay in the active population after age 75. Figure 11.2 shows the raw data, the assumed development year-based survival probabilities adopted for the current valuation and those assumed in the 2021 valuation. These survival probabilities have been updated to incorporate the most recent experience. The survival probabilities are lower than those selected at the 2021 valuation, reflecting the recent marked decline in active DRCA medical claimants. As in 2021, the age-based mortality rates for invalidity pensioners from the latest available actuarial review of military superannuation have been applied to the active claimant population from age 75.

Figure 11.2: Assumed survival probabilities for active DRCA medical claims to age 75



11.2.3 Future cashflows are then calculated by multiplying the resulting projections of active claimants by the average cost per active claimant. Figure 11.3 shows the average cost per active claimant by age over the last 2 calendar years and the selected assumption, together with the assumption adopted in 2021. The assumed average size is slightly higher than that selected at the 2021 valuation, reflecting the most recent experience.

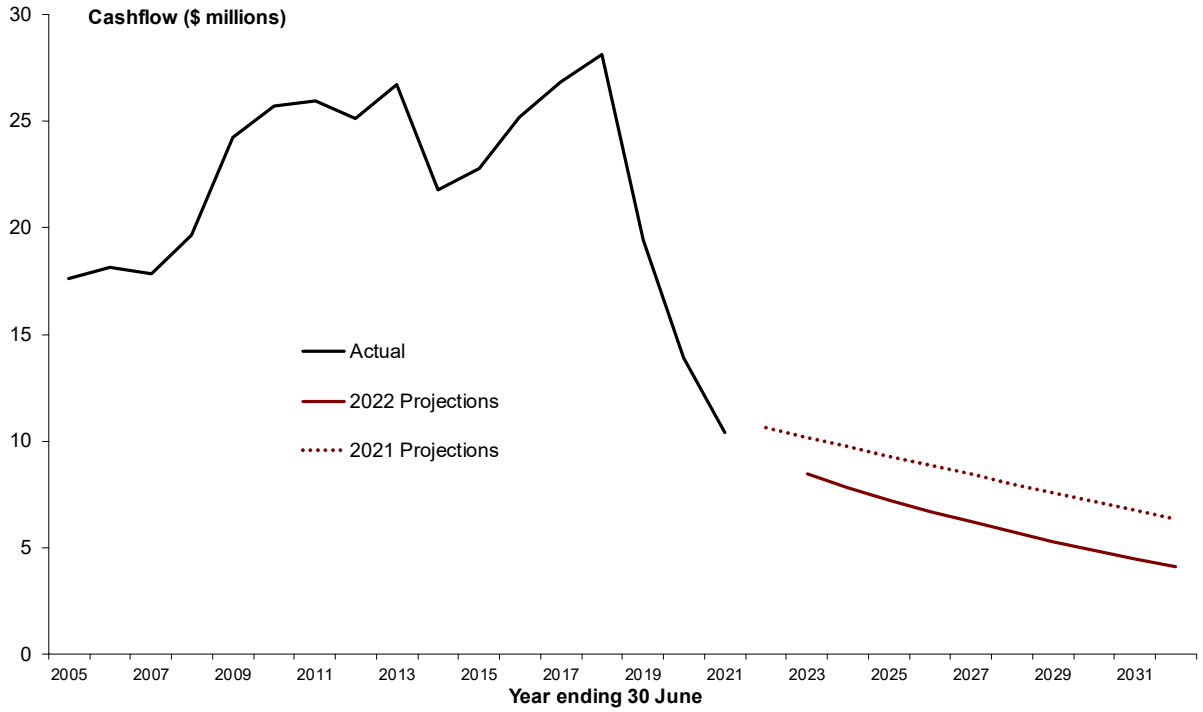
Figure 11.3: Average annual costs per active claimant by age



11.2.4 We have assumed that the average cost per active claimant will increase by 3.7 per cent per annum in future. This is somewhat higher than the inflation seen over the past few years but we regard it as a reasonable assumption going forward as costs are likely to be largely driven by wages.

11.2.5 Figure 11.4 shows the historical and projected cashflows for DRCA medical claims. The decrease in projected cashflows compared with the previous review reflects the reduced average size and lower development year-based survival probabilities adopted for the current valuation. Aggregate expenditure data to 31 March 2023 shows total outlays of $6.7m in the 9 months to date, suggesting a full year expenditure of around $9.0m for 2022–23. In light of this, our cashflow projections do not look unreasonable.

Figure 11.4: Historic and projected DRCA medical payments



11.3 Liability Estimate

11.3.1 Table 11.1 shows the estimate of the liability to meet medical costs broken down by year of accident. As noted above, we have treated claims shown with an accident date of after 2004 as having accrued before that date and pro-rated up the observed claims with an accident date prior to closure of the scheme.

Table 11.1: Outstanding claims liability for medical costs by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) ($ m)
1979 and before	16.2
1980 – 1984	4.3
1985 – 1989	7.3
1990 – 1994	11.9
1995 – 1999	15.2
2000 – 2004	11.4
Total	**66.3**
Expected at 30/06/2022	*100.5*
Total (30/06/2021)	**106.1**

11.3.2 The projected liability as at 30 June 2022 in the 2021 valuation for DRCA medical claims is $100.5m. The liability at the 2022 valuation is $66.3m, which is $34.2m lower than expected, reflecting the decrease in projected cashflows seen in Figure 11.7. The difference between these two figures is reconciled in Table 11.2.

Table 11.2: Reconciliation of liability for DRCA Medical cost

	$m
Liability estimate as at 30 June 2021 (previous report)	**106.1**
Assumed Interest	5.0
Projected Payments	(10.6)
Notional Premium	0.0
Projected liability as at 30 June 2022 (previous report)	**100.5**
Experience effects and assumption changes	
difference between actual and projected payments	2.6
difference between actual and projected claimant population	(16.4)
change in average cost	4.3
change in survival probabilities	(23.2)
change in inflation assumption	(1.5)
Current Estimate	**66.3**

12 Valuing Non-Incapacity Benefits – MRCA Medical Costs

12.1 Modelling Approach

12.1.1 Veterans entitled to medical benefits under the MRCA are issued with one of two types of medical treatment cards. The White Card provides veterans with entitlement to medical treatment for accepted service-related injuries or conditions, as well as all mental health conditions (for veterans with continuous full-time service or certain reserve service). The Gold Card provides veterans with entitlement to clinically required treatment for all medical conditions. Veterans may also receive reimbursements for medical expenses privately incurred.

12.1.2 Veterans may receive a Gold Card if they:

- have impairment points of at least 60 from service-related injuries or conditions;
- have impairment points of at least 50 from service-related injuries or conditions and are eligible for the Special Rate Disability Pension;
- have impairment points of at least 30 from service-related injuries or conditions and receive a Service Pension; or
- are aged 70 years or over with qualifying service.

A wholly dependent partner, eligible young person or other dependent who is eligible for compensation in respect of a veteran's death under MRCA may also receive a Gold Card.

12.1.3 Historically, we have modelled the costs associated with both Gold Cards and White Cards together, using an overall average size and usage probability assumption. This approach was originally adopted as the number of veterans with a MRCA Gold Card was small, and there was limited experience to derive separate assumptions for Gold Card holders and White Card holders. Over the past few years however, the number of MRCA veterans with Gold Cards has increased substantially, largely driven by the increase in the number of veterans reaching 60 impairment points within permanent impairment.

12.1.4 In order to investigate the experience of veterans with White Cards and Gold Cards separately, we requested additional data from DVA for this valuation. DVA provided us with unit record data beyond the valuation date to 31 December 2022 as well as the list of MRCA White Card and Gold Card holders as at 31 December 2022 including card issue dates. Receiving data to 31 December 2022 allowed us to analyse experience based on calendar years and to set assumptions based on this more contemporaneous data. We supplemented this data with impairment point data retrieved by linking MRCA medical claimants with the permanent impairment claims data. A large proportion of medical claimants also have claims for permanent impairment.

12.1.5 Experience varies substantially by card type, reflecting not only the expanded range of benefits available under a Gold Card, but also the higher levels of impairment associated with Gold Card eligibility. The average size across all age groups is higher for veterans with Gold Cards, and claimants with Gold Cards are more likely to utilise their card on an ongoing basis.

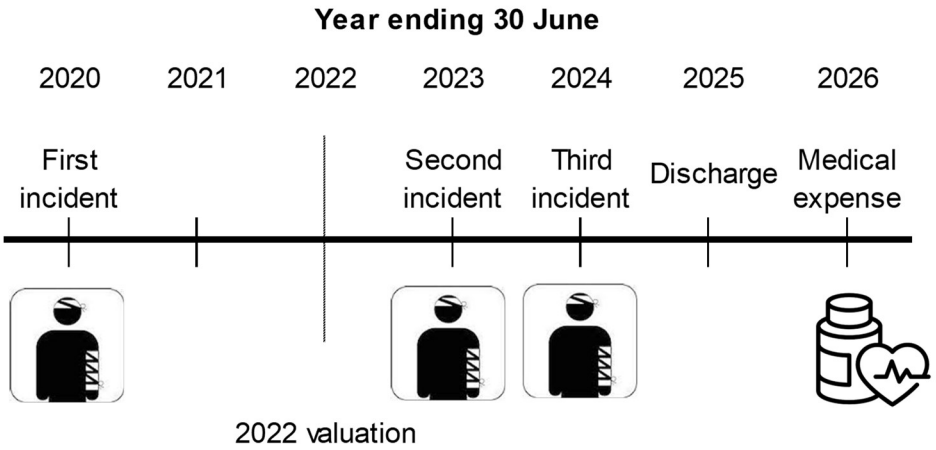
12.1.6 For the current valuation, we have revised our methodology for modelling future payments under MRCA medical. The new model projects medical claimants and models the transition from White Card status to Gold Card status over time. These assumed transition rates vary by duration from first medical payment and have been selected based on an assumed ultimate Gold Card proportion. Separate average size and utilisation rate assumptions by card type are used to reflect differences in usage patterns between the two cohorts.

12.1.7 We have continued the use of the first year of accident for determining development year. However, most MRCA claimants have multiple claims spanning a range of accident years. Furthermore, expenditure is incurred through the use of health care cards and the data does not record the particular condition to which a service was related. For those with Gold Cards, all medical expenditure is covered, not just that related to compensable conditions. This means there is considerable ambiguity about the proportion of expenditure that should be treated as part of the liability at the valuation date.

12.1.8 As with DRCA, we have used the existence of ADF health to conclude that those who have incurred expenditure will have been discharged from the ADF. Thus, any future projected expenditure for claimants who have had any medical transactions in the past can be treated as fully accrued, regardless of what date of accident might be recorded on future claims. That is, all future expenditure arising from these claimants forms part of the liability as at 30 June 2022. This is not necessarily true for reservists, but the assumptions we have adopted are intended to allow for this.

12.1.9 There is a further population of potential claimants who have already suffered an incident that could be expected to lead to future MCS medical expenditure but have not incurred any such expenditure to date. It is possible that these people have been discharged from service. However, it is also possible that they are still serving members of the ADF. For this latter group, future expenditure may relate to incidents that occurred before the valuation date but there is the potential for expenditure to arise from future incidents that occur after the valuation date. Figure 12.1 illustrates a hypothetical scenario of this type.

Figure 12.1: Illustrative claim scenario



12.1.10 In this example, one of the three incidents which will give rise to future medical expenditure has occurred before the valuation date, but the other two occur in the future. Conceptually, only that portion of expenditure that relates to the first incident should be treated as a liability for the current valuation. In estimating the liability, therefore, we need to treat the population

that have not yet given rise to medical expenditure differently from those who have already incurred expenditure.

12.1.11 For those who have had medical expenditure in the past (and, hence, can be assumed to have been discharged from the ADF), we have used utilisation rates to project the proportion of claimants that will incur expenditure in future years. We allow for mortality to gradually reduce this population over time.

12.1.12 For the population who have not incurred medical expenditure (and whose ADF status is therefore unknown), we have used claim rates based on development year from date of earliest claim to project the number of claimants we might expect to see in future who have an earliest accident year prior to the valuation date. A proportion of these future claimants will have only one claim. For this subset, all future expenditure forms part of the liability.

12.1.13 Based on experience to date, however, we would expect most future claimants to have multiple claims. This is particularly the case for those with a long period between the earliest incident and first medical expenditure. To determine the proportion of future expenditure that should be treated as accrued at the valuation date and included in the liability, we have used information on the historical distribution of claims conditional upon the period of time between the earliest accident year and the year in which expenditure is first incurred. In the scenario illustrated in Figure 12.1 above, one of the three incidents occurs prior to the valuation date and, hence, we would treat one third of the expenditure as having accrued as at 2022, while the remaining expenditure for this individual would form part of the notional premium for future years.

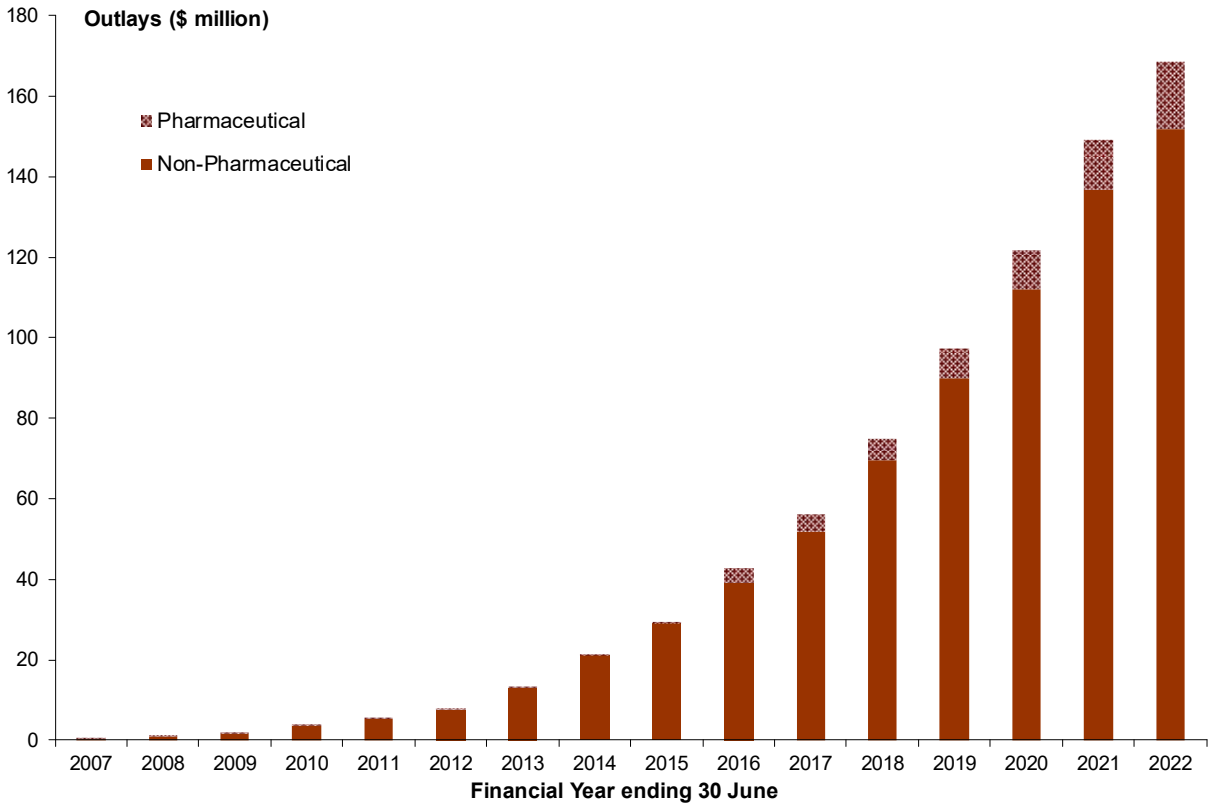
12.1.14 Once we have projected the medical treatment population accounting for future transitions to Gold Card status and assigned an accrued proportion, we apply assumptions on card utilisation and average size to estimate the future cashflows that should be included in the liability.

12.1.15 Note that, as in previous years, we have not included those receiving only pharmaceutical benefits in the claimant population, but instead applied a loading to projected non-pharmaceutical cashflows in line with the historical relationship between the two components of expenditure. For the current valuation, this loading was selected to be 12 per cent, compared with 10 per cent at the previous valuation, consistent with experience observed over the two most recent calendar years.

12.2 Recent Experience and Valuation Assumptions

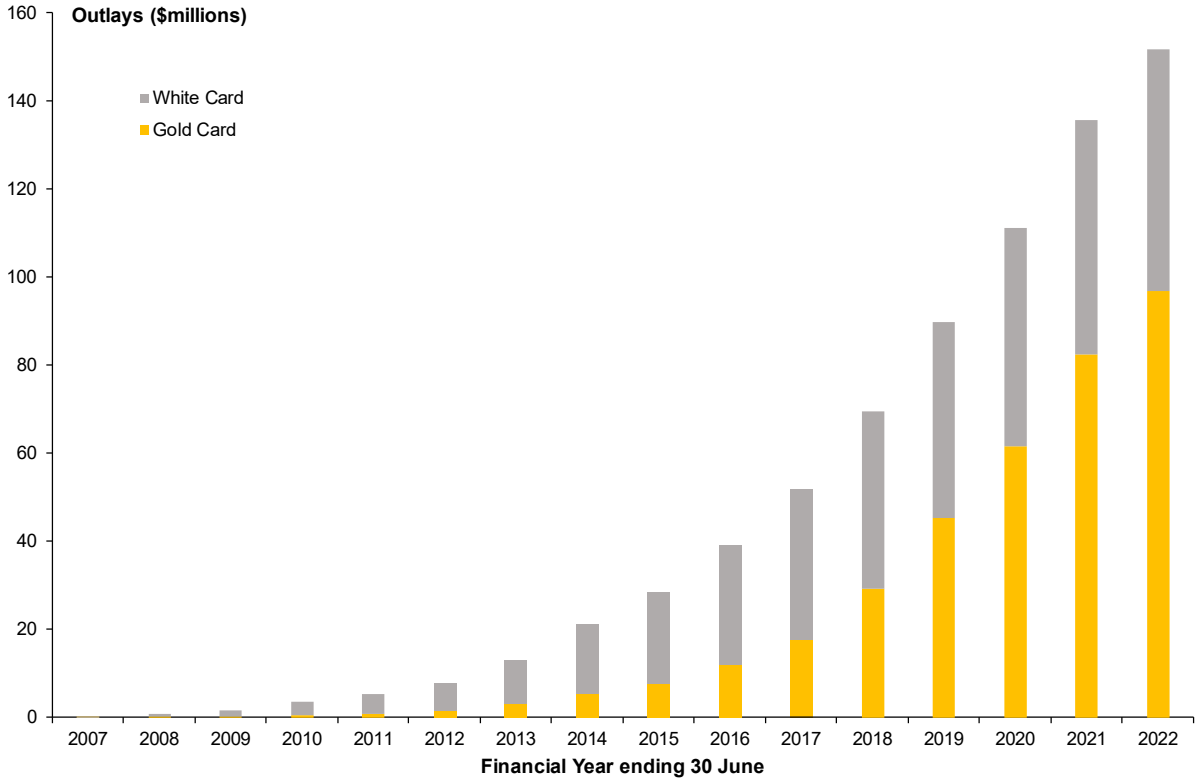
12.2.1 Figure 12.1 shows MRCA expenditure with the outlays for pharmaceutical benefits separately identified. Outlays grew very slowly over the early years of operation of the scheme but have increased rapidly over the last few years with an increase of 13 per cent in the latest financial year.

Figure 12.2: Expenditure on MRCA medical



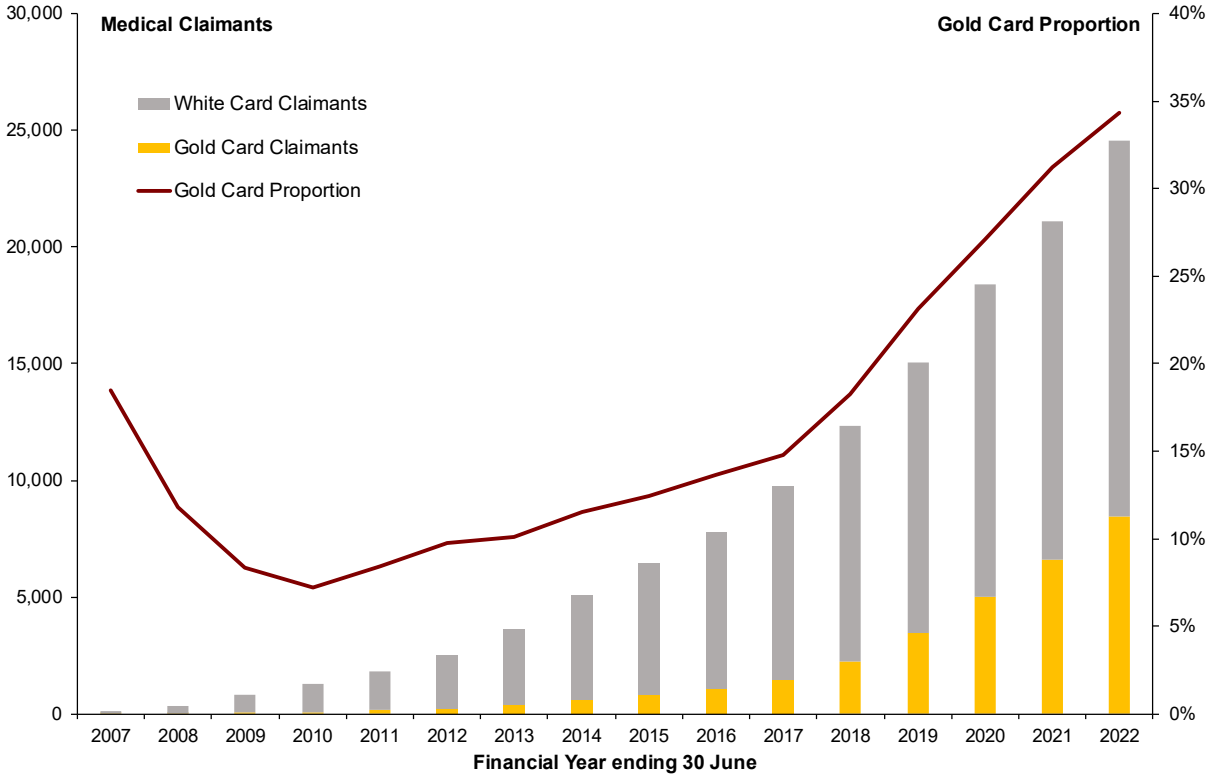
12.2.2 Figure 12.3 shows the MRCA non-pharmaceutical expenditure separated by card status. Payments have been allocated based on the claimant's card status within the year, and all expenditure for claimants without a Gold Card has been allocated to the White Card category. Gold Cards originally contributed a relatively small proportion to overall MRCA Medical outlays. Since 2013 however, expenditure arising from Gold Cards has exhibited substantial growth, reaching 64 per cent of MRCA non-pharmaceutical medical outlays in the 2022 financial year.

Figure 12.3: Expenditure on MRCA Medical by Card Type



12.2.3 Figure 12.4 provides further insights into the growth in Gold Card expenditure over this period. It can be seen that it is the increase in the number of medical claimants with a Gold Card that is driving this increase in Gold Card outlays. In the most recent financial year, around 34 per cent of claimants accessing medical benefits had a Gold Card.

Figure 12.4: MRCA Medical Claimants by Card Type



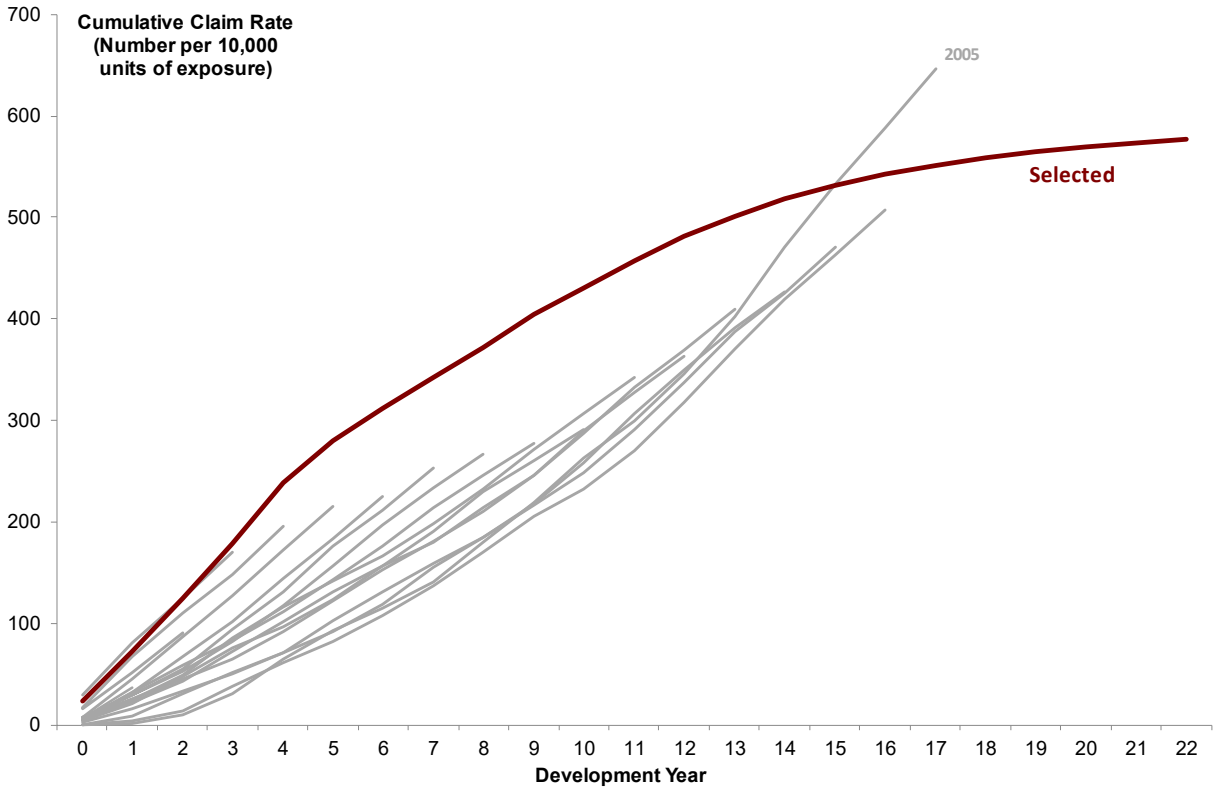
12.2.4 Based on the additional data received this year, we were able to analyse and model the Gold Card and White Card cohorts separately. The new model projects medical claimants, including existing claimants as well as incurred claims that have not yet given rise to expenditure, and models the potential transition to Gold Card status over time.

12.2.5 Figure 12.5 shows the relationship between earliest accident year and the year in which medical expenditure is first incurred. It is clear that the pattern of claims emerging has changed substantially since the commencement of MRCA. There has been a significant increase in the number of new claimants emerging in MRCA medical who are claiming for medical benefits only a few years after their first injury date. At the same time however, older accident years also appear to have new claimants emerging a number of years after the first injury date. Of particular note is the 2005 year, the earliest accident year for MRCA, which is still exhibiting an upwards trend rather than any stabilisation, as claimants are still emerging.

12.2.6 The trend for a large number of claimants to access medical benefits in early development years has reversed somewhat over the past 2 years. This could suggest that the early experience observed for the 2018 to 2020 accident years was anomalous. Alternatively, it could suggest that the current backlog in MRCA initial liability is delaying the emergence of medical claimants accessing benefits, particularly in the years immediately following the initial injury.

12.2.7 It is currently too early to determine what proportion of the most recent experience is due to timing or process changes and what proportion is a genuine change in the pattern of claims emerging amongst DVA's clients. As medical benefits can be accessed for a long period of time, sometimes for over 60 years, it might still be some time before experience is mature enough to set the claims rate assumption with more certainty. We will continue to closely monitor the experience.

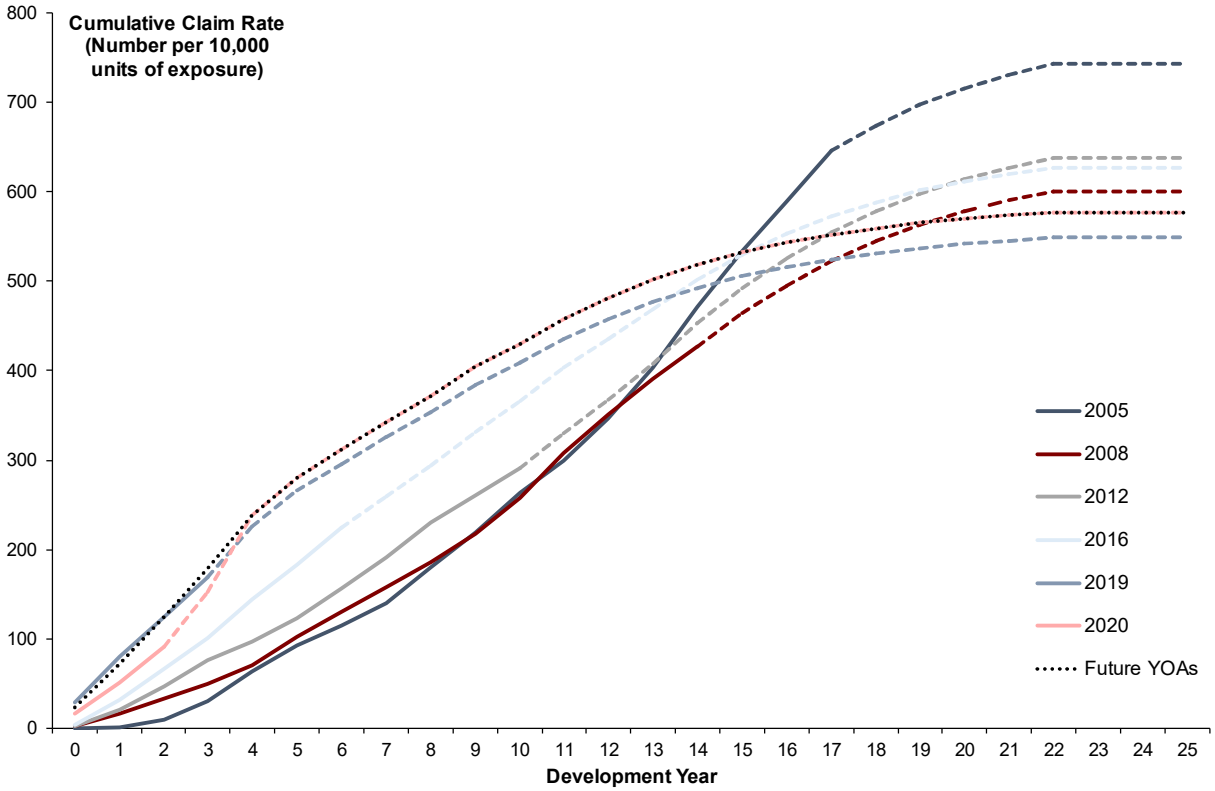
Figure 12.5: Cumulative claim rate by lag between earliest accident year and first expenditure



12.2.8 We have retained the selected claims rates from the previous review. That is, we have again applied different chain ladder factors for accident years 2005 to 2014, 2015 to 2017 and 2018 onwards. Our selected development ratios attempt to account for potential timing differences for different accident years. For example, we expect a veteran who was injured in the earliest years of the scheme to approach DVA a number of years later than those who are injured in 2023. There is some evidence of this in the experience where we are currently seeing high numbers of claimants with their first injury incurred in the earliest years of the scheme, and where veterans receiving benefits in the early development years has increased over time.

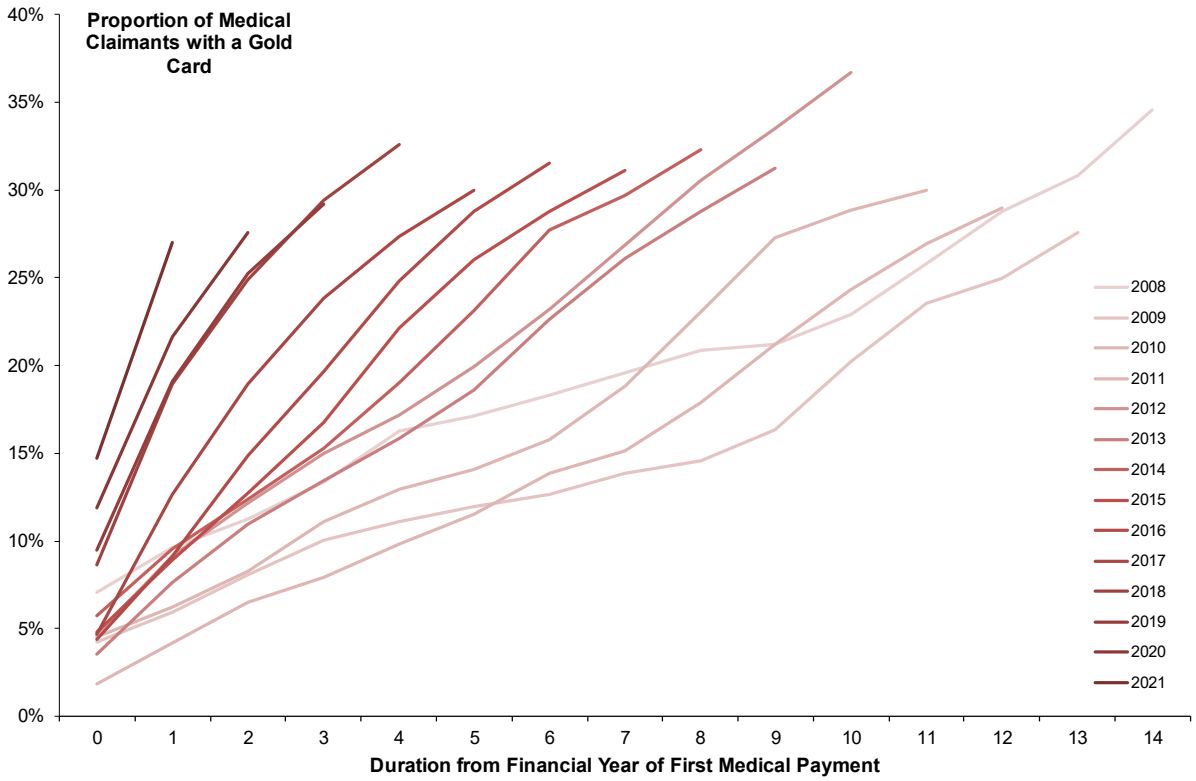
12.2.9 We have made an adjustment to account for the potential impact of current processing constraints on the three most recent years of accident. The number of claimants arising from the last three accident years has been lower than the level implied by the selected curve for these accident years, potentially reflecting the impact of current claims processing limitations. We have adjusted the development factors over the next two financial years in order to retain the assumed number of ultimate claims for these accident years. The projected claimant numbers for a subset of accident years is shown in Figure 12.6.

Figure 12.6: Projected cumulative claim rate by lag between earliest accident year and first expenditure for selected accident years



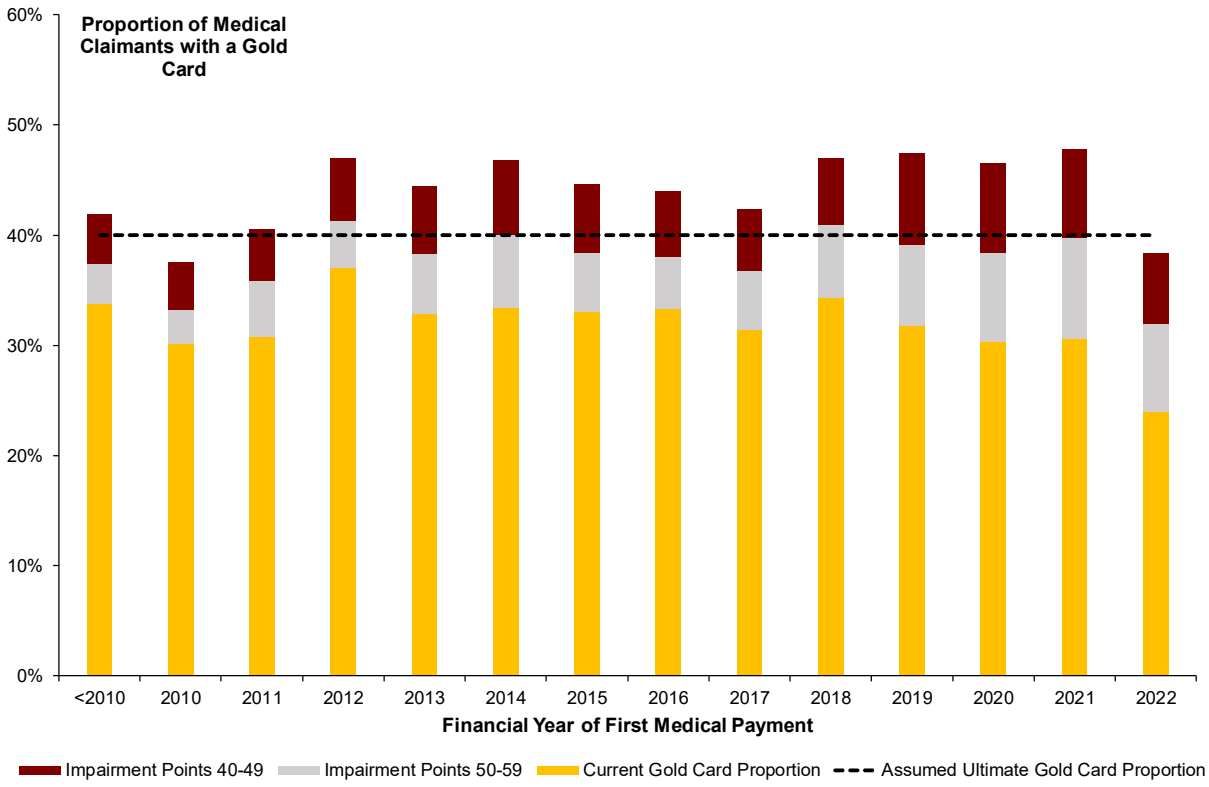
12.2.10 Once we have projected the medical claimant population, we then model the transition to Gold Card status. The majority of Gold Cards are issued to veterans as a result of the veteran reaching 60 impairment points, or 50 impairment points if the veteran has eligibility for a special rate disability pension. As such, it may take claimants a number of years to accumulate the level of impairment points required for Gold Card eligibility. Figure 12.7 shows the historical transition to Gold Card status by duration from first medical payment by cohort. Note that cohorts here are defined by financial year of first medical payment. The pattern of transition has changed considerably over the period presented. Older cohorts displayed low transition probabilities initially, but have exhibited significantly higher transitions at later durations. Conversely, more recent cohorts are seeing higher transition rates at earlier durations that appear to be leveling off much sooner than was the case for older cohorts. This likely reflects policy changes within DVA as well as the growth observed in permanent impairment claims over recent years.

Figure 12.7: Proportion of MRCA Medical Claimants with a Gold Card by Duration from Financial Year of First Medical Payment



12.2.11 We have selected an ultimate proportion of medical claimants that will receive a Gold Card, and adjusted the duration specific transition probabilities such that each cohort will converge to the assumed ultimate proportion over time. In setting this ultimate proportion, we have given consideration to the proportion of veterans with overall impairment points close to Gold Card eligibility. We also consulted with subject matter experts from the relevant policy and program areas within DVA to inform this assumption. At this valuation, we have assumed 40 per cent of claimants will eventually receive a Gold Card. This is higher than the proportions observed to date and allows for further growth across all cohorts. We note the substantial uncertainty inherent in setting an ultimate assumption in the face of evolving experience and will continue to review this assumption as experience emerges.

Figure 12.8: Proportion of Medical Claimants with a Gold Card by Financial Year of First Medical Payment



12.2.12 Once the future claimant population by card status has been projected, a utilisation rate and an average expenditure per active claimant is applied to estimate the future cost of medical benefits. Utilisation rates are used to project the probability of a claimant accessing medical services in a given year. Utilisation rates replace the usage probabilities dependent on one or three years of payment history that were used in previous years, though conceptually these two approaches are analogous and only differ in application for existing claimants.

12.2.13 The utilisation rates by duration and financial year of first medical payment cohort for White Card holders are shown in Figure 12.9. Utilisation rates for White Cards begin at 100 per cent by definition. Utilisation rates for White Cards are volatile and ultimate utilisation rates vary across cohorts. For existing claimants, the current experience has been interpolated using an average of the most recent two years of utilisation rates. The experience of claimants from the two most recent cohorts has been interpolated and applied for future claimants. Actual and projected utilisation rates for a sample of cohorts is shown Figure 12.10 along with the selected utilisation rates for future new medical claimants.

Figure 12.9: White Card Utilisation Rate by Duration from Financial Year of First Medical Payment

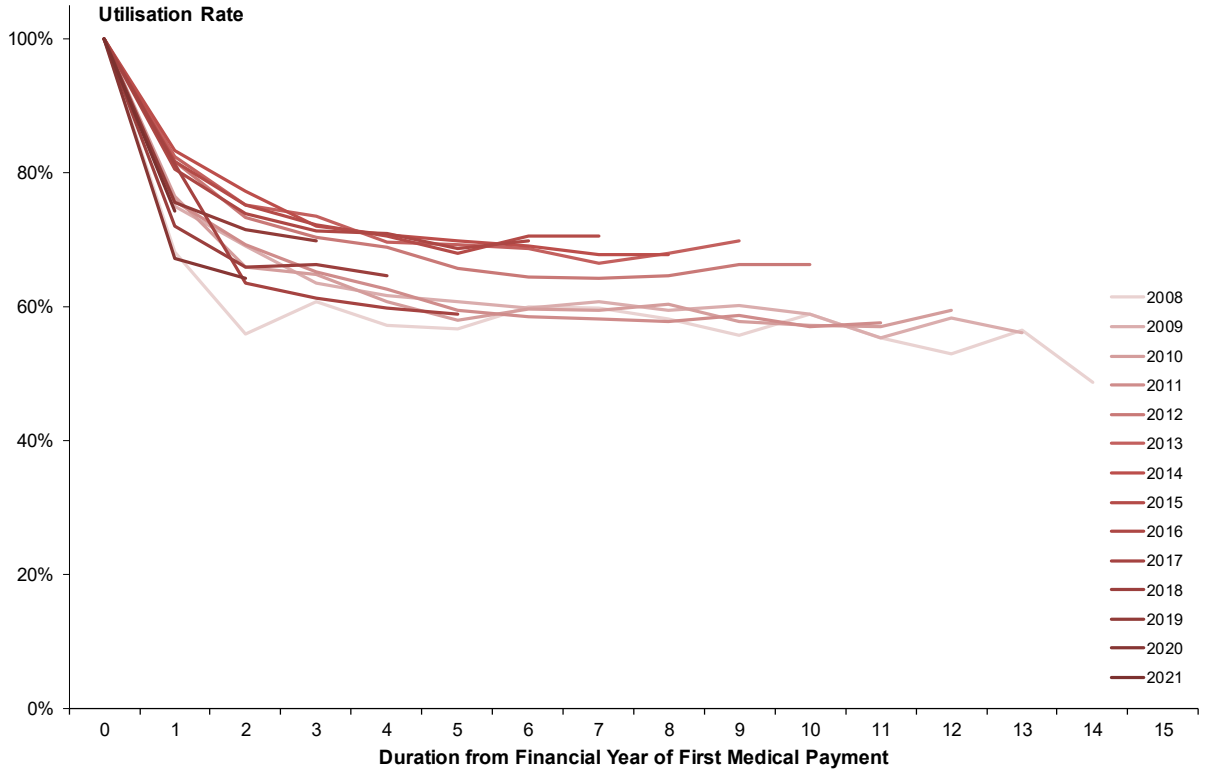
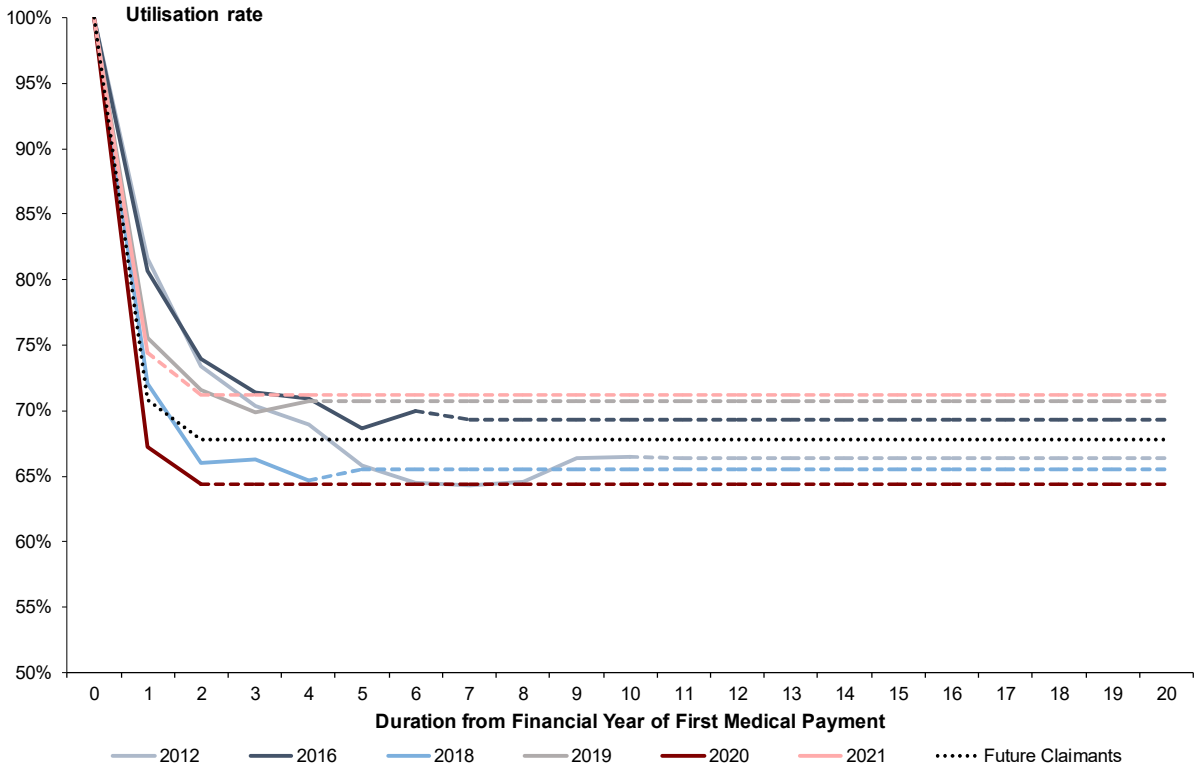
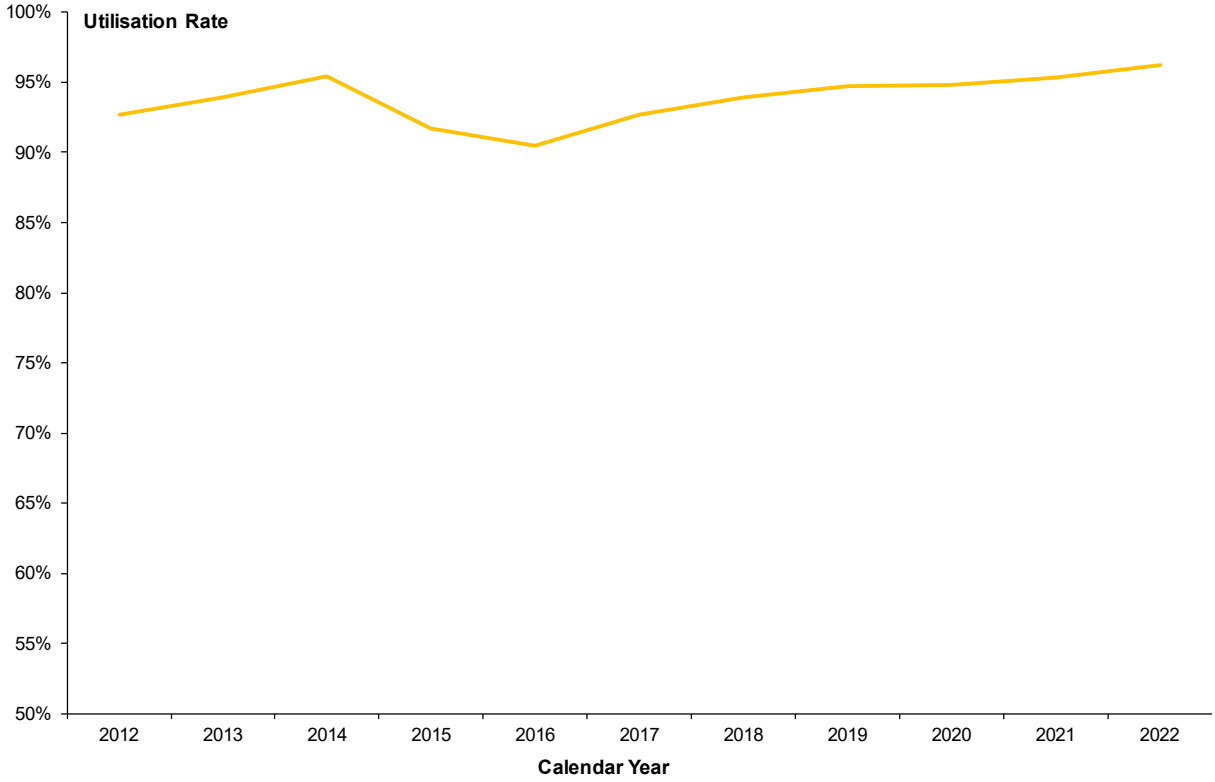


Figure 12.10: Projected White Card Utilisation Rate by Duration from Financial Year of First Medical Payment for Selected Cohorts



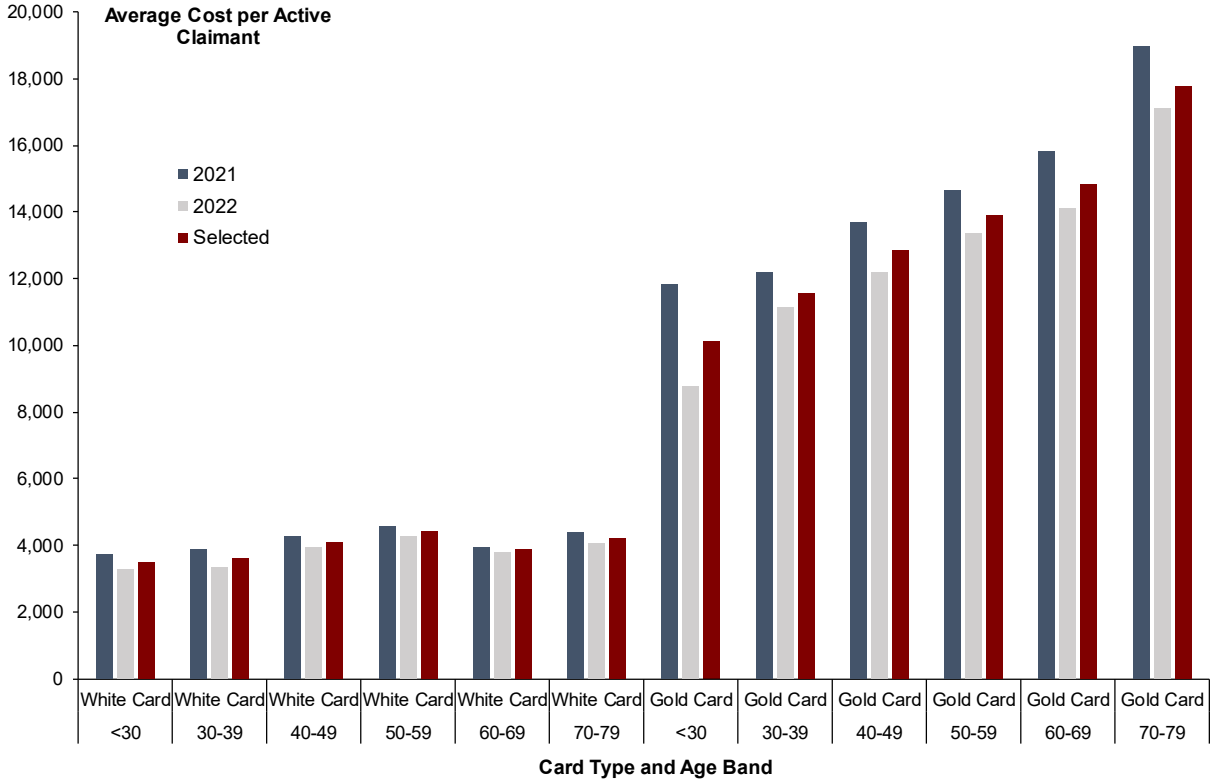
12.2.14 Figure 12.11 below shows historic Gold Card utilisation rates by calendar year. Utilisation rates are significantly higher for claimants with a Gold Card compared with claimants with a White Card, again reflecting the expanded range of benefits provided under a Gold Card as well as the higher levels of impairment implied through Gold Card status. Gold Card utilisation rates have been relatively stable over time, particularly over recent years. We have selected a Gold Card utilisation rate of 96 per cent, consistent with recent experience.

Figure 12.11: Gold Card Utilisation Rate by Calendar Year



12.2.15 The average expenditure per active claimant, that is the average expenditure for claimants utilising medical benefits in a given year, is assumed to vary by card type and age band. Figure 12.12 shows the average expenditure per active claimant observed for MRCA over the last two calendar years. The average expenditure per active claimant is substantially higher for Gold Cards across all ages, reflecting the fact that all medical expenditure is covered as well as the higher levels of impairment required for eligibility. It can be seen that the average cost across most age bands has declined slightly over the most recent calendar year.

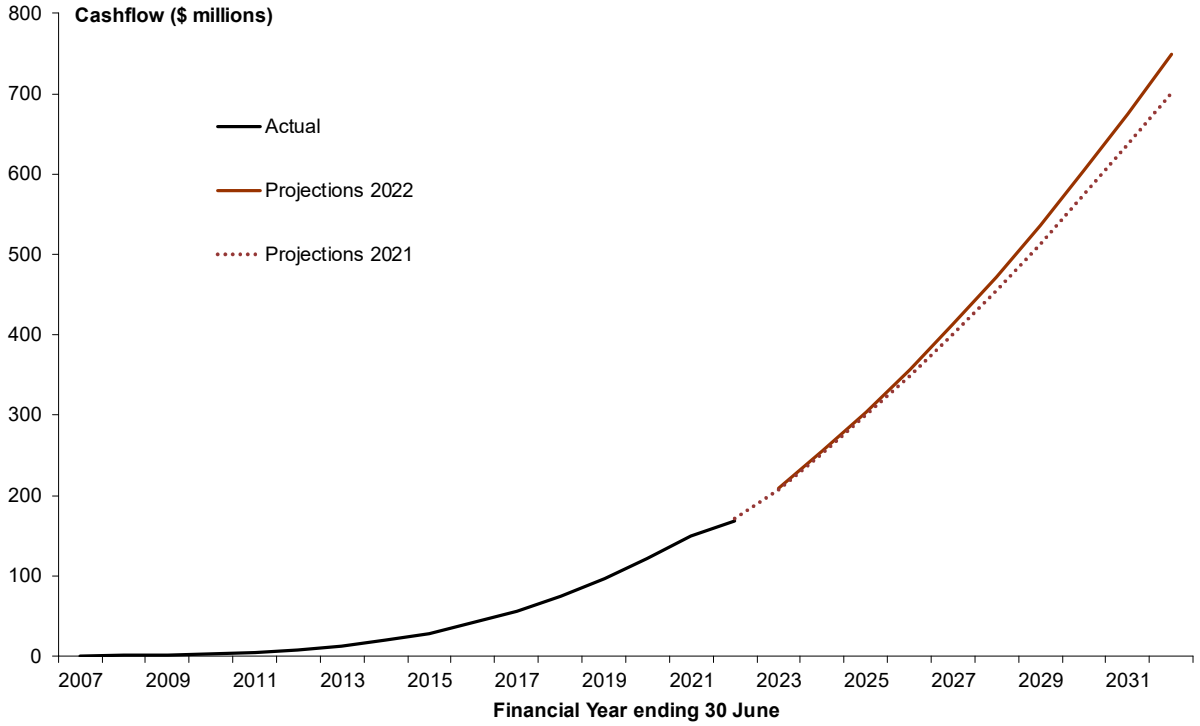
Figure 12.12: Average expenditure per active claimant



12.2.16 The assumed expenditure per claimant is based on the average of the last two calendar years, and these amounts are assumed to grow by 3.7 per cent per annum in line with expected long term wage growth. For those aged greater than 80, where experience is currently not available, we have assumed usage will be consistent with the 70–79 age group. We will continue to monitor this assumption as more experience emerges. For new claimants, we assume expenditure commences in the middle of the year and accordingly, have applied a ratio of 50 per cent to usage for these claimants in their first year.

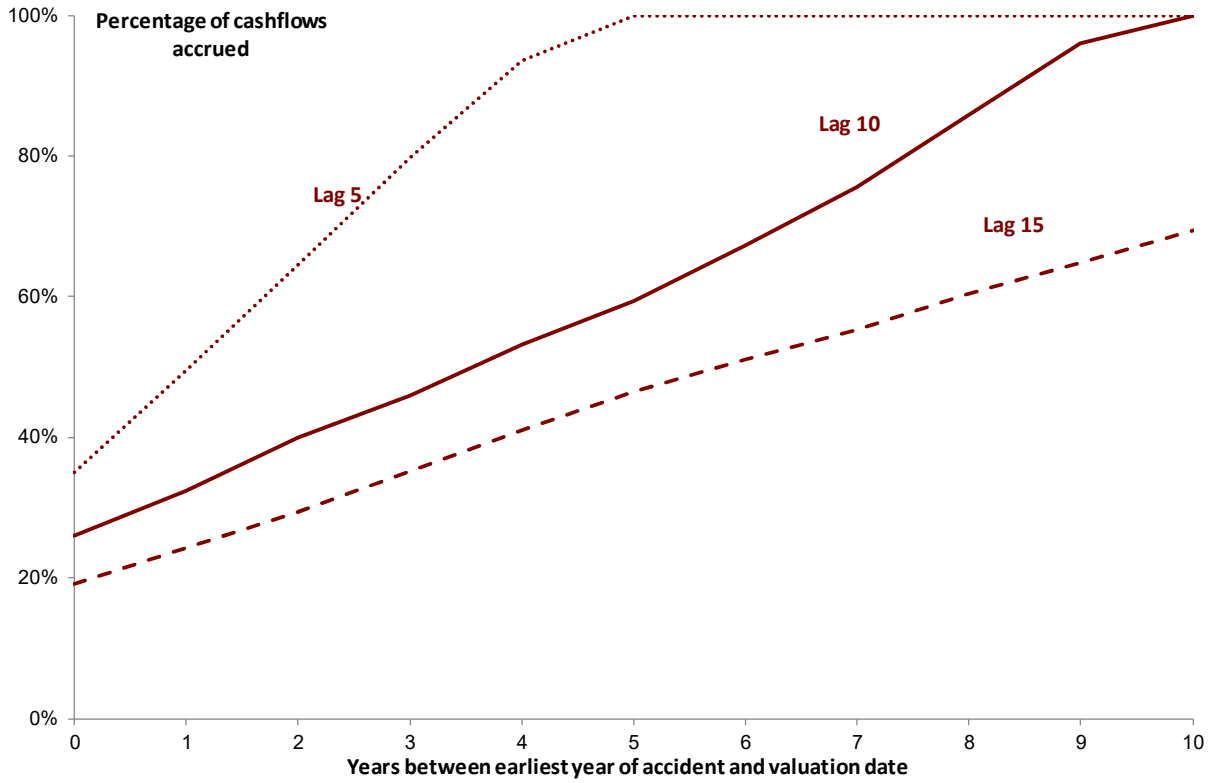
12.2.17 Applying the utilisation rates and average cost figures to the projected population figures gives an estimate of total future cashflows as shown in Figure 12.13.

Figure 12.13: Historic and projected cashflows for MRCA medical



12.2.18 Some of these cashflows will relate to incidents that occur after the valuation date. In order to arrive at an estimate of the incurred expense, we have examined how accident dates are spread over the period between the earliest accident year and the year in which expenditure is first accrued. Figure 12.14 shows the proportion of claims with an accident prior to a given date within this period for three different lag periods.

Figure 12.14: Distribution of claims



12.2.19 Note that we would not expect the average cost per claim to be constant for different claim numbers, since, on a per claim basis, the first claim is likely to involve more expense than subsequent claims. However, there is a strong positive correlation and, as a simplifying assumption, we have used the percentages shown in Figure 12.14 to split projected expenditure between amounts accrued at the valuation date and amounts expected to be accrued in future accident years. For example, for a claimant with an earliest accident year of 2017 and a 10 year lag until medical expenditure is incurred, the proportion of expenditure that is assumed to be accrued as at the valuation date of 30 June 2022 can be found by looking at the Lag 10 curve where the x-axis value is 5, that is, 59 per cent.

12.2.20 While this might slightly underestimate accruals for full-time ADF personnel there is an offsetting effect from reservists, for whom the assumption that claims have fully accrued at the time of first expenditure may not be true. Given the high level of uncertainty around the estimates of medical costs, we do not believe that this simplifying assumption is unreasonable.

12.2.21 Under our assumption that an individual has discharged at the point at which expenditure first occurs, all future expenditure is assumed to be accrued from that time.

12.3 Liability Estimate

12.3.1 Table 12.1 shows the estimate of the MRCA liability to meet medical costs broken down by earliest year of accident. As noted in the previous section, there is now some MRCA liability related to accident years prior to 1 July 2004 and some of the liability shown against later accident years will arise from those with DRCA claims and a MRCA health care card.

Table 12.1: Outstanding claims liability for MRCA medical costs by year of earliest accident

Year of accident year ending 30 June	Liability ($ m)
2004 and before	186.7
2005 – 2009	4,392.7
2010 – 2014	4,323.7
2015	714.2
2016	709.2
2017	740.3
2018	545.4
2019	571.1
2020	557.6
2021	500.1
2022	386.2
Total	**13,627.2**
Expected at 30/06/2022	*12,481.3*
Total (30/06/2021)	**11,187.1**

12.3.2 The estimated liability at 30 June 2022 is $13,627.2m. The projected liability in the 2021 valuation for 30 June 2022 was $12,481.3m. Table 12.2 below shows the reconciliation of liability results for MRCA from last year to this year.

Table 12.2: Reconciliation of liability for MRCA medical costs

	$m
Liability estimate at 30/06/21 (previous report)	**11,187.1**
Assumed Interest	577.1
Projected Payments	(171.7)
Notional Premium	888.8
Projected liability as at 30 June 2022 (previous valuation)	**12,481.3**
Experience effects and assumption changes	
difference between actual and projected payments	3.2
change in experience	(169.7)
reclassification of payments	(976.1)
change in claimant projection[7]	(1,505.1)
change in average size (old method)	26.1
change in pharmaceutical loading	179.3
change in usage probabilities (old method)	810.4
card type methodology change	4,090.5
accrual methodology change	(306.6)
change in inflation assumption	(1,006.0)
Current Estimate	**13,627.2**

7 The change in claimant projection is in part driven by the reclassification of payments.

13 Valuing Non-Incapacity Benefits – DRCA Rehabilitation

13.1 Modelling Approach

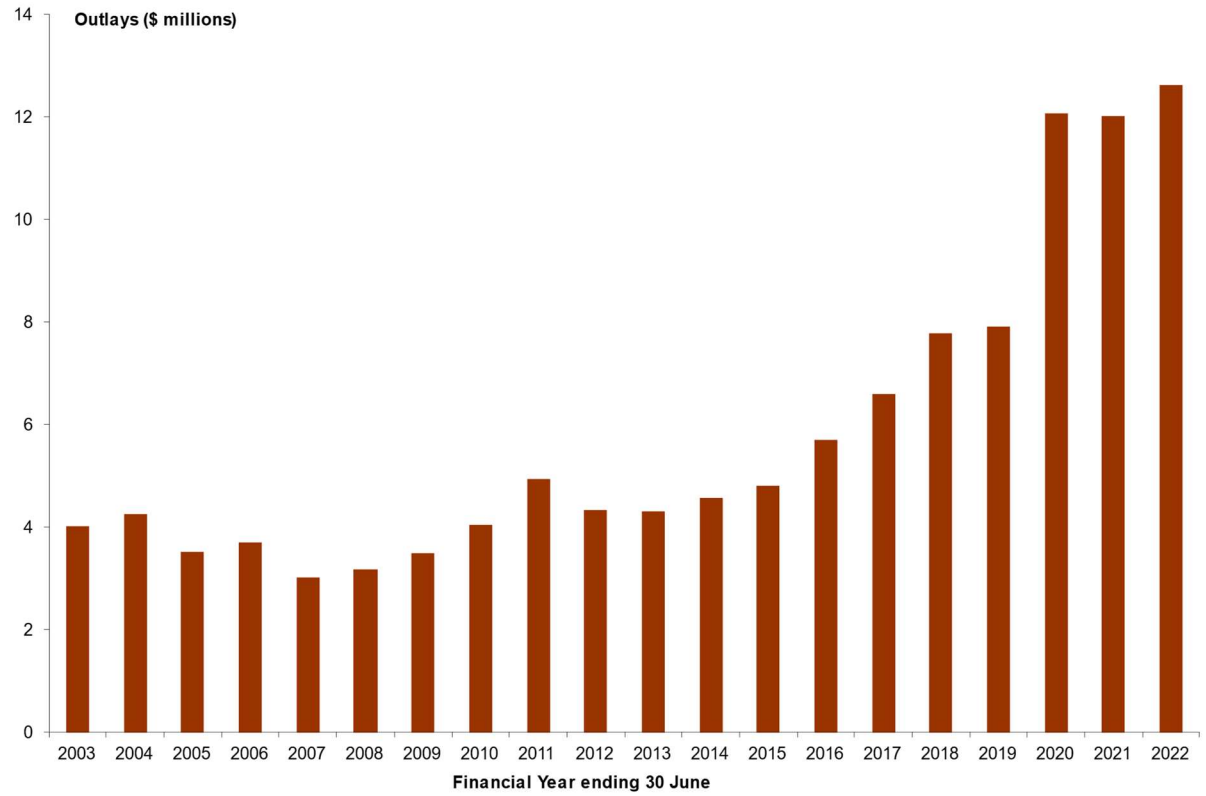
13.1.1 Rehabilitation is the smallest component of the DRCA non-incapacity liability.

13.1.2 Our modelling approach involves fitting a cubic spline to the pattern of claims per unit exposure by development year observed over the last two years, and then applying an assumption around average amounts paid per claim.

13.2 Recent Experience and Valuation Assumptions

13.2.1 Figure 13.1 shows the expenditure on rehabilitation for DRCA since 2003. The experience increased rapidly over the period from 2013 to 2018, followed by a large jump in expenditure in 2020 that has been sustained across the last 3 years.

Figure 13.1: Expenditure on DRCA rehabilitation



13.2.2 The main objective of rehabilitation expenditure is to return the veteran to work. This tends to primarily be through socialisation and retraining with some expenditure also related to minimising claimants' functional impairments. DVA clients receiving incapacity payments are required to participate in the rehabilitation program. DRCA claimants, due to their higher average age, will tend to have reduced prospects for a return to the labour force. At the same

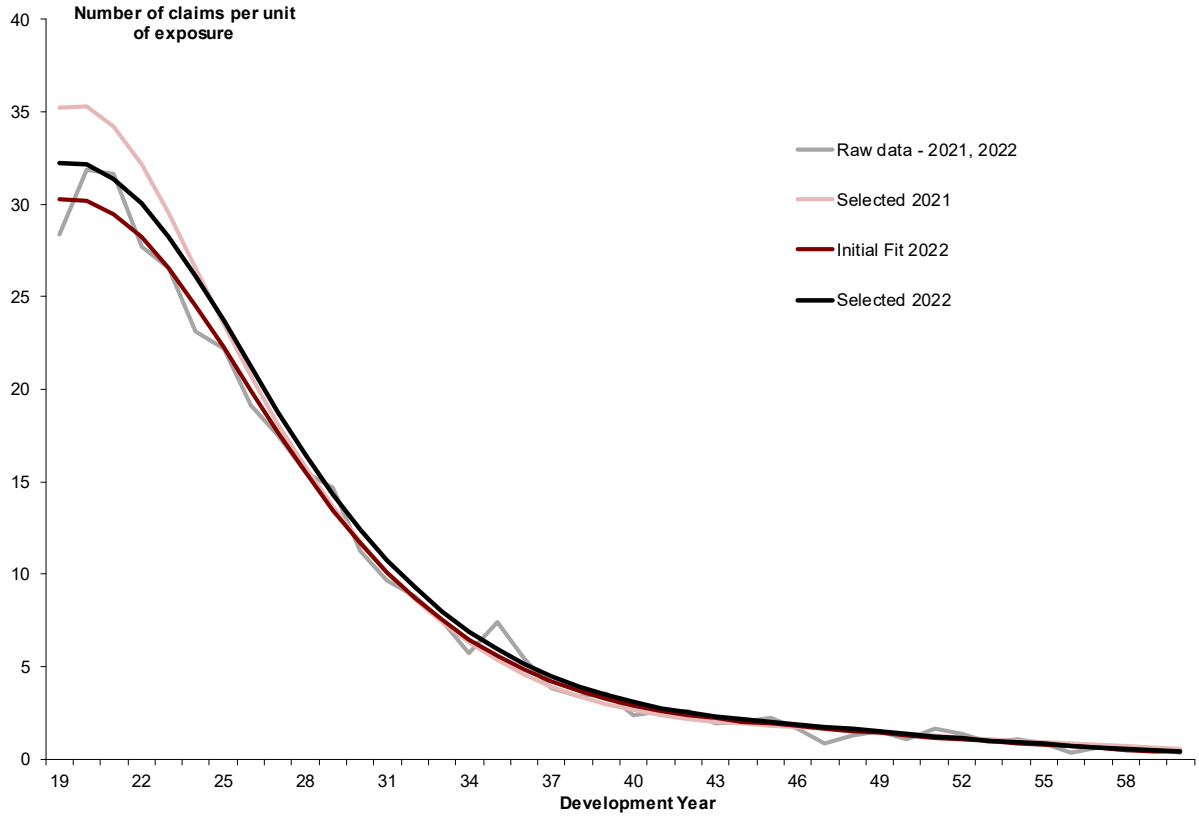
time, the degree of functional impairment is likely to increase with advancing age. The relative importance of the two objectives in DVA's approach to rehabilitation is therefore likely to influence DRCA outlays in this area. For example, DVA advised that the period of rapid growth between 2007 and 2010 was the result of an increased focus on rehabilitation for all veterans, not just those with a prospect of returning to work. Subsequently, rehabilitation efforts became more focussed on return to work programs and, given the older age profile of DRCA claimants, this is likely to have explained the decline until 2012–13. The most recent increases are a result of higher utilisation rates, particularly among those with accident years between the early nineties and early 2000s.

13.2.3 In recent years, claimants who were studying were able to retain 100 per cent of their incapacity benefit past the initial 45 week period. DVA staff advised that this led to increasing numbers of claimants remaining on rehabilitation programs than they had seen historically and could have contributed to the high levels of expenditure seen in recent years. This scheme has since closed.

13.2.4 Figure 13.2 compares the number of claims per unit of exposure over the two most recent calendar years with the assumptions adopted for the current valuation and the 2021 valuation. Although the selected rates are lower in the earlier development periods compared to the previous valuation, they are higher from development 25 onwards, perhaps reflecting higher number of long duration claimants from DRCA.

13.2.5 As with incapacity benefits, we have made an allowance for the impact of the initial liability backlog on rehabilitation benefits. To account for this in the valuation, we analysed the lodged initial liability claims as at 31 December 2022 and based on historical conversion rates between initial liability, incapacity payments and rehabilitation payments, we have increased the observed claim rates by 6.5 per cent to account for potential impacts of processing delays on the most recent experience. To account for the existing backlog of IL claims, a conversion rate was applied to the incapacity backlog derived in section 6 of the report to determine the potential impact on rehabilitation payments.

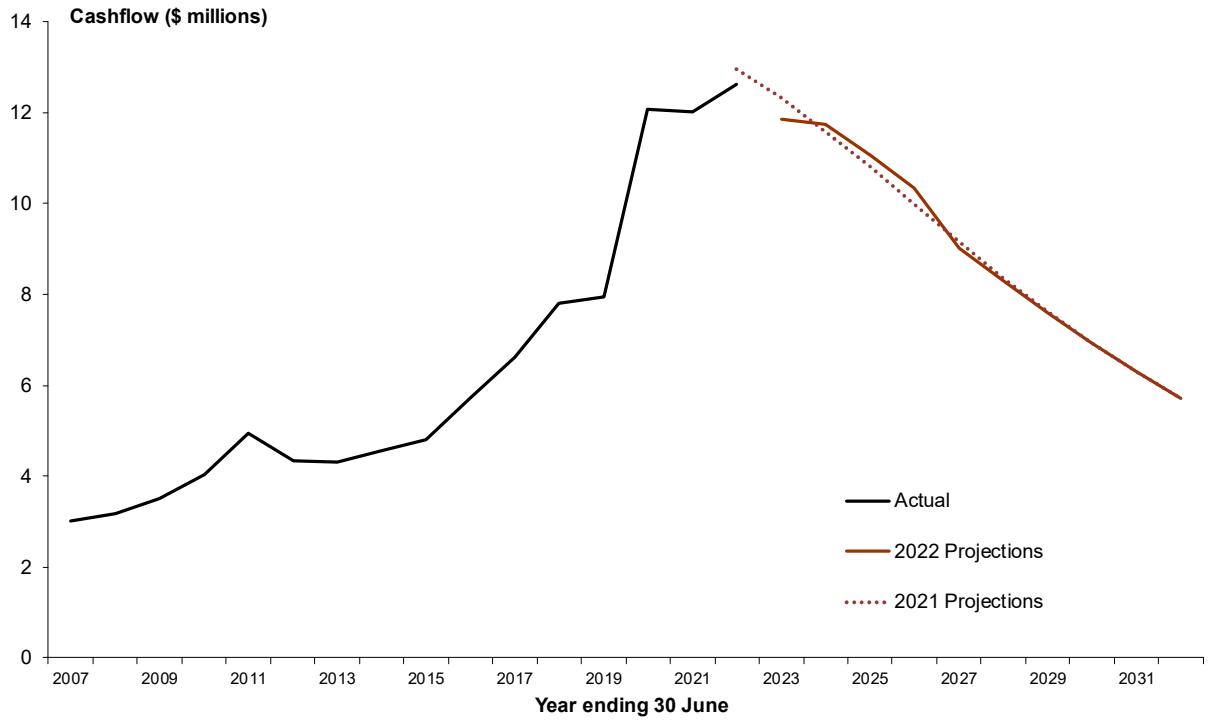
Figure 13.2: Number of claimants per unit of exposure – DRCA rehabilitation



13.2.6 The average cost per claimant was selected to be $4,909, based on experience over the most recent two calendar years. We have assumed that the average cost per claimant will increase by 3.7 per cent per annum in future. This is somewhat higher than the inflation seen over the past few years but we regard it as a reasonable assumption going forward given that costs should be driven in large part by wages.

13.2.7 The resulting projected cashflows are shown in Figure 13.3, together with the historic cashflows and the projections from the 2021 valuation. The increased claim rate assumption has led to an increase in projected cashflows over the next 10 years. It also shows the effects of the existing backlog which is expected to be processed in line with processing speeds adopted for incapacity benefits.

Figure 13.3: Historic and projected DRCA rehabilitation payments



13.3 Liability Estimate

13.3.1 Table 13.1 shows the estimate of the liability for DRCA rehabilitation costs broken down by year of accident.

Table 13.1: Outstanding claims liability for rehabilitation costs by year of accident

Year of accident (year ending 30 June)	Liability (inflated and discounted) ($ m)
1979 and before	5.1
1980 – 1984	5.1
1985 – 1989	8.4
1990 – 1994	14.8
1995 – 1999	24.3
2000 – 2004	39.2
Total	**96.8**
Expected at 30/06/2022	*97.8*
Total (30/06/2021)	**105.8**

13.3.2 The 2021 valuation projected a liability of $97.8m as at 30 June 2022. The current estimate is $96.8m, which is $1.0m lower than expected, reflecting the update to assumptions. Table 13.2 reconciles the current liability estimate with the earlier figure.

Table 13.2: Reconciliation of liability for rehabilitation costs

	$m
Liability estimate at 30/06/21 (previous report)	**105.8**
Assumed Interest	5.0
Projected Payments	(13.0)
Notional Premium	0.0
Projected liability as at 30 June 2022 (previous valuation)	**97.8**
Experience effects and Assumption changes	
difference between actual and projected payments	0.3
change in claimant projection	4.6
change in average cost	(3.8)
change in inflation assumption	(2.2)
Current Estimate	**96.8**

14 Valuing Non-Incapacity Benefits – MRCA Rehabilitation

14.1 Modelling Approach

14.1.1 MRCA rehabilitation is modelled based on the number of claimants per unit of exposure and the average expenditure per claimant. The pattern of claimants by development year is derived by fitting a cubic spline to a composite series derived from MRCA data for the 2021 and 2022 calendar years and DRCA claims experience for the later development years where we have no MRCA experience.

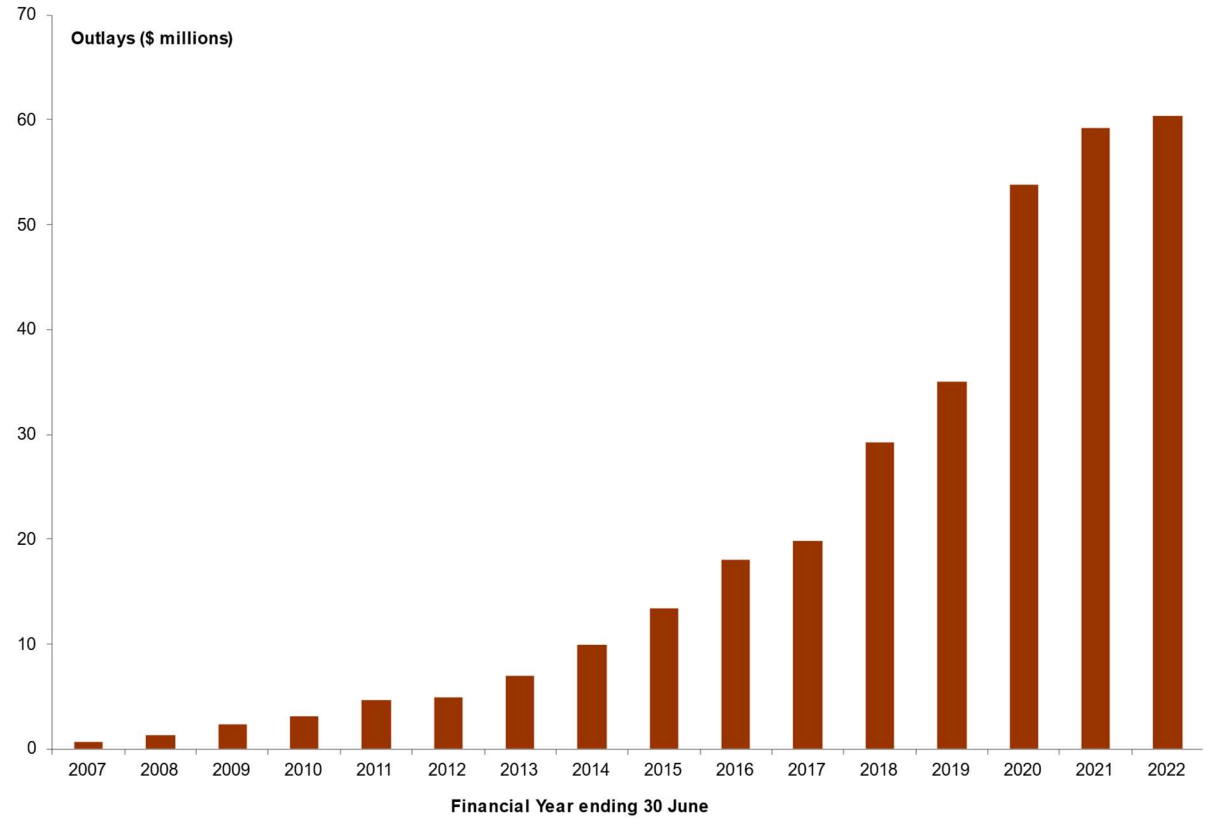
14.1.2 The MRCA claim rates observed to date are well above those seen for DRCA immediately prior to closure of the scheme, but the MRCA rates for durations where we have recent data for both schemes are lower than the rates we are now seeing for DRCA. It does not seem unreasonable that the higher rates of utilisation of rehabilitation services in the early development years could lead to lower utilisation rates in later years. We have therefore used an average of the most recent DRCA experience and the rates which applied immediately prior to closure in 2004 as the basis for setting assumptions for the later development years.

14.1.3 The average cost per claimant has been derived from the most recent MRCA experience.

14.2 Recent Experience and Valuation Assumptions

14.2.1 Figure 14.1 shows the expenditure on rehabilitation for MRCA since 2006. Expenditure has grown strongly over the period, with a significant increase seen in the 2020 financial year. Since 2020, expenditure has remained relatively stable.

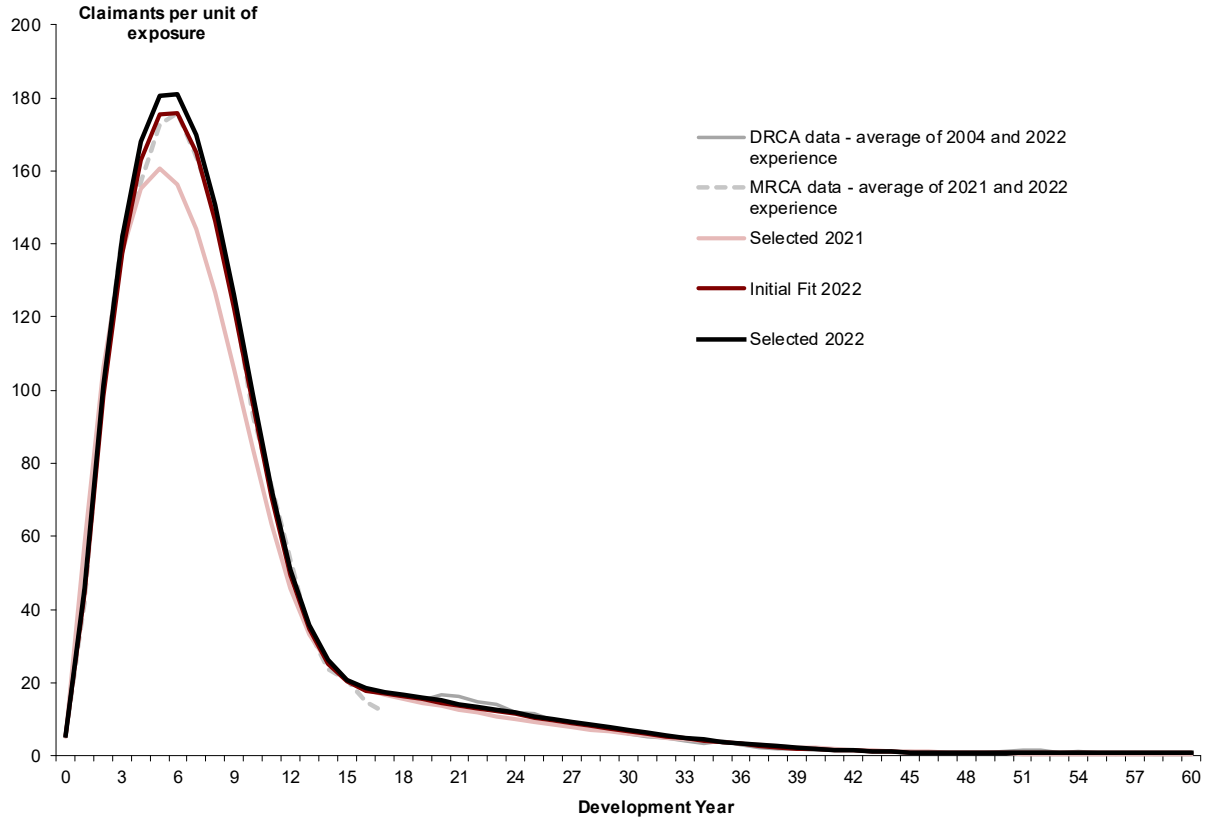
Figure 14.1: Expenditure on MRCA rehabilitation



14.2.2 Figure 14.2 shows the raw data that was used for setting assumptions, together with the selected MRCA assumption which applies from 2022–23 onwards. The rates assumed in the 2021 valuation are also shown for comparison.

14.2.3 As with incapacity benefits, we have made an allowance for the impact of the initial liability backlog on rehabilitation benefits. To account for this in the valuation, we analysed the lodged initial liability claims as at 31 December 2022 and based on historical conversion rates between initial liability, incapacity payments and rehabilitation payments, we have increased the observed claim rates by 3 per cent to account for potential impacts of processing delays on the most recent experience. To account for the existing backlog of IL claims, a conversion rate was applied to the incapacity backlog derived in section 6 of the report to determine the potential impact on rehabilitation payments.

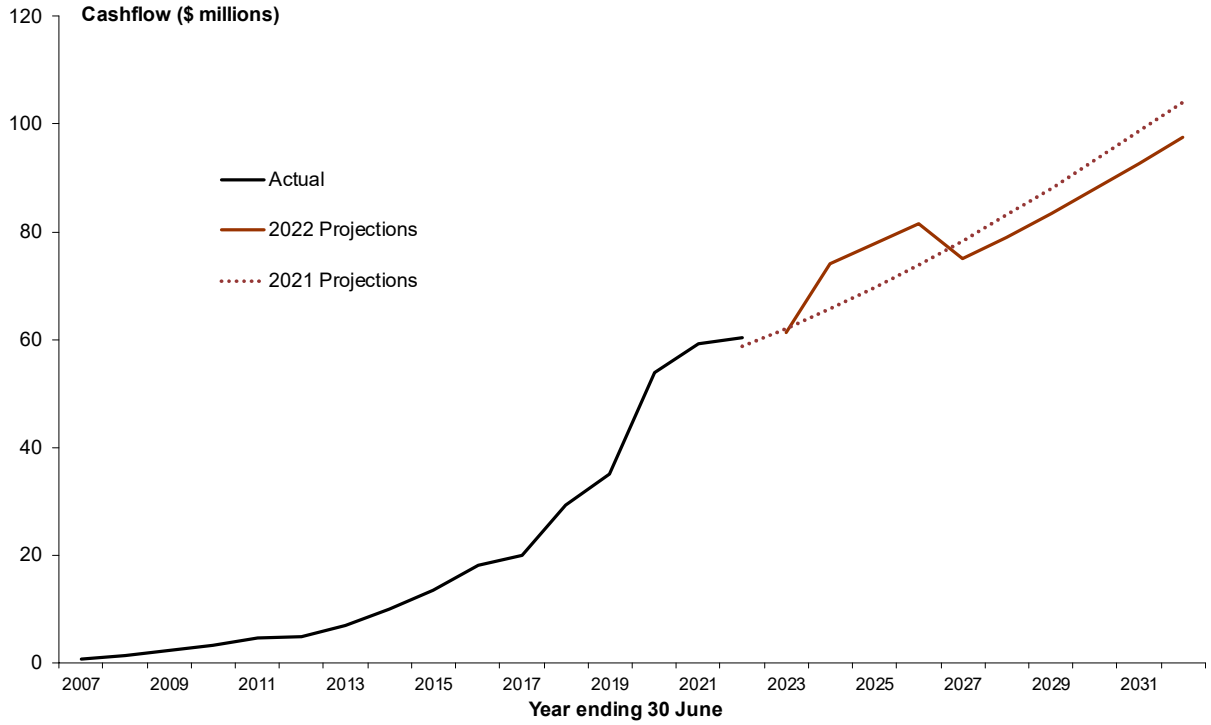
Figure 14.2: Number of claimants per unit of exposure – MRCA rehabilitation



14.2.4 An assumption on the average cost per claimant was also required and this was based on the most recent two years of experience and set at $5,955. As with DRCA, we have assumed that the average cost per claimant will increase by 3.7 per cent per annum in future. This is somewhat higher than the inflation seen over the past few years, but we regard it as a reasonable assumption going forward given that costs should be driven in large part by wages.

14.2.5 Figure 14.3 shows the historical and projected cashflows for MRCA rehabilitation payments, together with the projections from the 2021 valuation. The heightened expenditure across 2023–24 to 2026–27 reflects the expected processing of the existing initial liability backlog and its impact on rehabilitation payments.

Figure 14.3: Historic and projected MRCA rehabilitation payments



14.3 Liability Estimate

14.3.1 Table 14.1 shows the estimate of the liability for MRCA rehabilitation costs broken down by accident year.

Table 14.1: Outstanding claims liability for rehabilitation costs by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) ($ m)
2005 – 2009	37.8
2010 – 2015	111.2
2016	35.9
2017	43.0
2018	49.4
2019	55.1
2020	60.5
2021	64.7
2022	64.7
Total	**522.2**
Expected at 30/06/2022	*505.0*
Total (30/06/2021)	**474.9**

14.3.2 The 2021 valuation projected a liability of $505.0m as at 30 June 2022. The adjustments to the assumptions have resulted in an increase in the estimated liability. The liability at

30 June 2022 is $522.2m; this is $17.2m higher than projected last year. Table 14.2 reconciles the current liability estimate with the 2021 projection.

Table 14.2: Reconciliation of liability for MRCA rehabilitation costs

	$m
Liability estimate at 30/06/21 (previous report)	**474.9**
Assumed Interest	23.9
Projected Payments	(58.7)
Notional Premium	65.0
Projected liability as at 30 June 2022 (previous valuation)	**505.0**
Experience effects and Assumption changes	
difference between actual and projected payments	(1.8)
change in claimant projection	59.4
change in average cost	(29.2)
change in inflation assumption	(11.3)
Current Estimate	**522.2**

15 Valuing Non-Incapacity Benefits – Death Benefits

15.1 Modelling Approach and Assumptions

15.1.1 Death benefits are the smallest liability among the various heads of damage and the number of deaths can be highly variable from year to year. The assumptions made therefore involve a more significant degree of judgement relative to the other components of the liability.

15.1.2 Under DRCA, lump sum benefits are payable to surviving spouses on death due to work related causes. In addition, fortnightly benefits are payable to dependent children until they reach the age of 21. Under MRCA, a lump sum death benefit is payable on death where the deceased had suffered impairment as a result of service assessed at 80 or more impairment points, and an additional benefit is payable to a dependent spouse where the death occurred in service. The lump sum death benefit is broadly equivalent to the VEA widow's pension and can be taken as a periodic payment or a lump sum. A further lump sum benefit is payable in respect of each dependent child as well as an additional lump sum where the death has been accepted as having been related to ADF service.

15.1.3 The DRCA maximum lump sum death benefit payable as at 1 July 2022 was $596,838, while the maximum MRCA lump sum benefit was $1,007,150 with the actual amount payable dependent upon the age of the widow or widower and whether or not the death is accepted as having been related to ADF service.

15.1.4 Apart from deaths due to long latency diseases, such as asbestos related illnesses, the main compensable cause of death is likely to be accidental. Lump sum benefits payable on death would also generally be expected to be paid within a relatively short time after the death. Thus, in most cases, the lag between the time of the injury causing death and the payment of benefits will be relatively short.

15.1.5 From September 2017, the smoking policy was amended to allow claims for smoking-related illnesses if they satisfy certain criteria under the DRCA scheme. There is a possibility that this could increase the number of DRCA death claims. Further to this, policy changes were made in November 2018 to lower the level of evidence required in relation to asbestos exposure for veterans who served on certain RAN ships from 1940 to 2003. In addition, changes to straight through processing for mental health conditions related to operational service could mean posthumous mental health diagnoses become easier to determine for suicide cases. Anecdotal evidence from the DVA policy area suggests that the broader suite of services provided by Service Coordination within DVA could have been proactively seeking out potential death payment claimants. All these factors could have led to the sustained high levels of death payments seen in recent years.

15.1.6 For MRCA, almost all death benefits paid to date have been paid within two years of the date of death, with over 40 per cent of the benefits being paid in the year of death and a further 40 per cent being paid in the following year. This might be expected to change in future as the scope for lagged claims increases with the ageing of the scheme. At this stage, however, we have not made any allowance for the emergence of lagged death claims under MRCA. This does not mean that such claims will not arise in future, but at present we have no basis for

making a judgement about the quantum of any liability. In particular, the DRCA experience with asbestos related diseases might not be expected to be a good guide to future MRCA outcomes.

15.1.7 For DRCA, however, typically around 30 per cent of death benefits paid in a given financial year are for deaths occurring more than two years prior to the end of the financial year and it is reasonable to model payments rather than deaths. This pattern of lags between deaths and payment has been reasonably consistent over the last 3 years and needs to be allowed for in the valuation since the amount of the death benefit entitlement will depend upon the year of death rather than the year of payment.

15.1.8 At this year's valuation, we have reallocated MRCA education scheme payments paid to dependents of members with accepted service-related deaths from the Other 2 category to the MRCA death provision. This is to allow for greater alignment of the benefit to cause of claim as these payments are also related to service-related deaths. This translates to a 2.4 per cent increase to the MRCA death benefit cashflows.

15.1.9 Table 15.1 shows the number of death benefits paid in each of the last 16 calendar years under DRCA and MRCA. Similar to last year, only the calendar year of death was provided in our data.

Table 15.1: Number of death benefits in recent calendar years

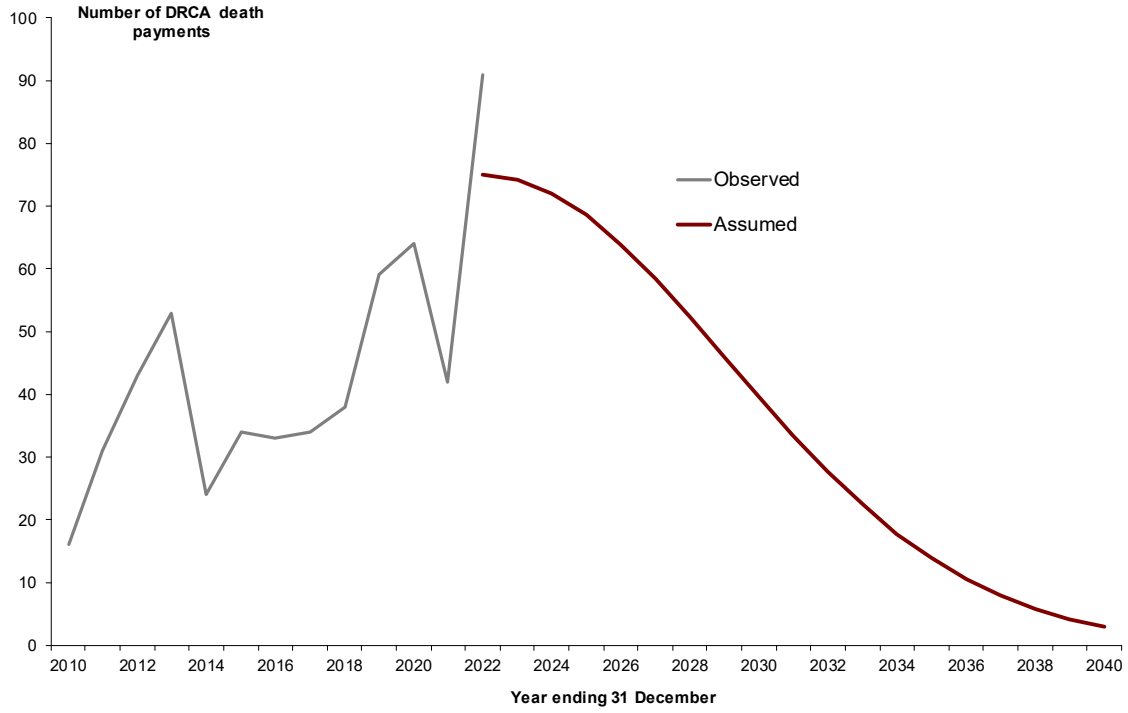
Calendar Year	DRCA Deaths	MRCA Deaths
2004	14	0
2005	10	7
2006	5	4
2007	15	9
2008	19	2
2009	24	5
2010	16	12
2011	31	14
2012	43	10
2013	53	8
2014	25	10
2015	33	8
2016	33	11
2017	34	15
2018	38	28
2019	59	22
2020	64	14
2021	42	30
2022	91	26

15.1.10 DRCA death benefit claims did not decline as expected following the closure of the scheme in 2004 but rather trended upwards. It seems likely that most of these claims have arisen from

long latency diseases such as those related to asbestos exposure. The future trajectory of these claims is quite uncertain. However, other information on claim patterns for asbestos related diseases suggests that such death claims are likely to continue for an extended period and the liability for these claims will be material. The possibility that a number of future claims could be linked to exposure to jet fuel or other toxic chemicals increases the level of uncertainty around these assumptions.

15.1.11 Figure 15.1 shows the run-off in claims assumed in 2022 against recent experience. We have seen a sustained high level of death payments over the last two years for DRCA. It is likely that recent policy changes, such as the change in service-related smoking take-up, could have had an impact on the level of claims arising.

Figure 15.1: Observed and assumed number of DRCA death payments from long latency diseases



15.1.12 We have assumed that these payments relate to deaths occurring up to 3 years prior to the year of payment. All the benefits are assumed to be paid at the higher rate which came into effect from 1 July 2009. In practice, a small number of claims relate to still earlier years and would be paid at the lower rates; this was the case for only two of the 91 claims in 2022. In view of the other uncertainties, we do not consider that this assumption gives rise to any material error.

15.1.13 We have retained our assumption of 25 deaths per year regarding the number of MRCA death benefit payments. Over the 18 full years of operation of the scheme, which encompasses a period of multiple overseas deployments, the number of deaths has averaged roughly 13 deaths per year. The number of deaths was lower in the earlier years of the scheme than in more recent years, with the number of deaths averaging approximately 23 deaths per year over the last 4 years compared to roughly 10 deaths per year in the first 14 years of the scheme.

15.1.14 The age distribution assumed for surviving dependants affects how long periodic payments made to a spouse or children are assumed to continue. Table 15.2 shows the age distribution adopted in the 2022 valuation for surviving spouses together with the latest observed data.

Table 15.2: Observed and assumed age distribution for surviving spouses

Age Group	Observed	2022 Assumption	2021 Assumption
Less than 25	6%	5%	5%
25–29	17%	15%	20%
30–34	13%	15%	10%
35–39	18%	20%	20%
40–44	15%	15%	15%
45–49	10%	10%	10%
50–54	9%	10%	10%
55–59	7%	5%	5%
60 or more	3%	5%	5%

15.1.15 The assumed age distribution of children is shown in Table 15.3 below. The assumptions are identical to those adopted at the 2021 valuation which are also included in the table.

Table 15.3: Observed and assumed age distribution for dependent children

Age Group	Observed	2022 Assumption	2021 Assumption
Less than 5	26%	25%	25%
5–9	29%	30%	30%
10–14	24%	22%	22%
15–19	18%	20%	20%
20 or more	3%	3%	3%

15.1.16 The average number of children per surviving spouse was 1.4; the same as the assumption adopted in 2021. Children's pensions are assumed to cease at age 21, while spouse pensioners are assumed to experience mortality in line with the most recent Australian Life Tables (ALT 2015–17).

15.1.17 Benefits are assumed to increase in the future in line with the relevant statutory provisions. For DRCA, this means that we are allowing for indexation of the lump sum benefit, which constitutes the bulk of the liability, in line with general wage growth and indexation of any periodic payment for children in line with price inflation. For MRCA, all benefits are indexed in line with price inflation.

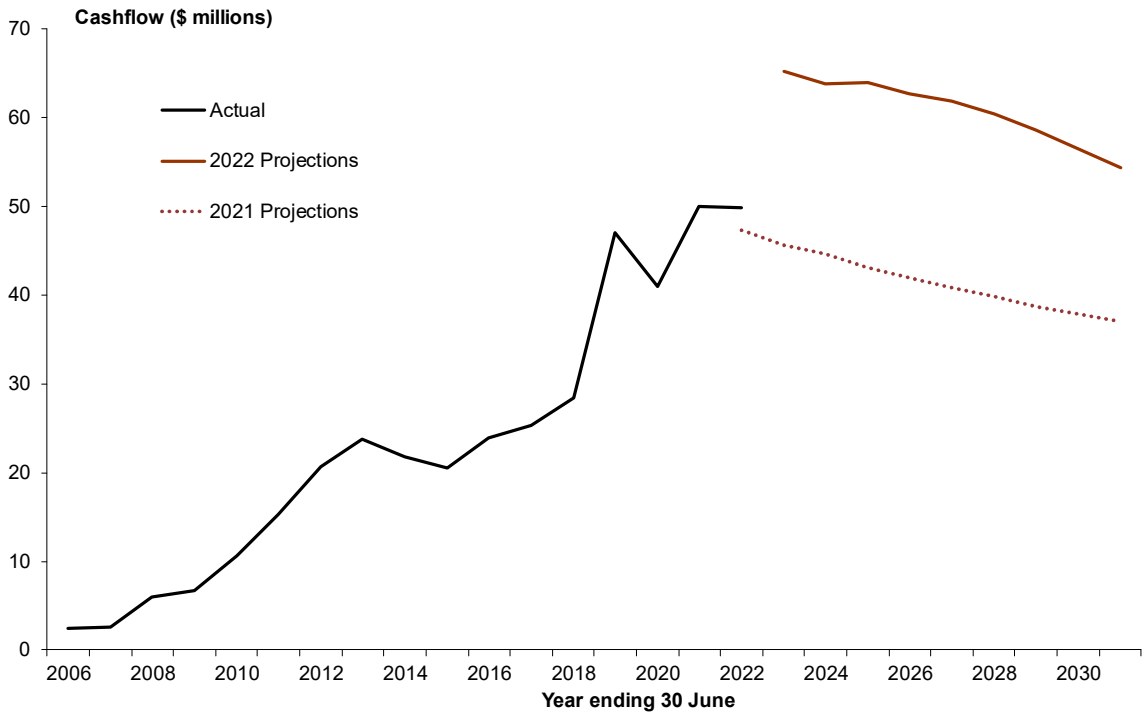
15.2 Liability Estimate

15.2.1 The liability estimate for death benefits amounts to $449.9m. The bulk of the liability relates to DRCA claims and the estimate is extremely sensitive to the assumed number of DRCA death payments. It is important to note that death benefits are extremely volatile and the degree of uncertainty around this assumption cannot be overstated. I consider the assumptions adopted to be reasonable but note that actual outcomes may turn out to be significantly different.

15.2.2 The projected cashflows have increased significantly this year, driven by higher claimant assumptions adopted for DRCA.

15.2.3 Figure 15.2 below shows the projected cashflows for both schemes combined.

Figure 15.2: Projected cashflows – DRCA and MRCA death benefits



15.2.4 At the previous valuation, we were projecting a total liability of $263.6m as at 30 June 2022, which is lower than the 2022 valuation result of $449.9m. The increase has been driven by the revised number of expected future deaths from DRCA. The revised figures reflect the most recent experience and is significantly higher than those expected at the previous valuation.

16 Valuing Non-Incapacity Benefits – DRCA Other

16.1 Modelling Approach

16.1.1 The residual category of 'other payments' covers transactions in respect of costs of household services, attendant care, legal costs, general services/medical examinations, travel, funeral expenses and damage to property.

16.1.2 We have historically divided expenditure under this head of damage into two categories. The first is payments associated with medical examinations and legal services undertaken as part of the claim process. We refer to this as the Other 1 category. The Other 2 category covers all other payment types, which relate primarily to attendant care and household services.

16.1.3 Other 1 expenditure has been split between medical examinations and legal expenses in order to take account of their quite divergent experience over recent years. For each type of payment, we have modelled the number of claims per unit exposure and applied an average cost to the resulting estimate of future claims.

16.1.4 For the Other 2 category, historically, we have adopted a similar approach used for DRCA medical outlays. That is, the most recent figure on the number of active claims is used, with a decay rate applied to estimate future active claim numbers. This approach was originally adopted as the number of claimants for Other 2 benefits was small. Over the past few years, however, we have observed a large increase in both the numbers of new claimants and active claimants for Other 2, driven by increases in the number of veterans accessing household services benefits.

16.1.5 Further discussions with DVA policy and program areas highlighted the relevance of an earlier (2019) policy change where household services benefits were brought into the needs assessment process and the maximum reassessment period was extended to 5 years. This may have contributed to the increase in the number of claimants seen in recent years and is likely to have an impact on benefit usage going forward.

16.1.6 For the current valuation, we have updated our modelling approach in response to recent experience and to better capture the increasing numbers of claimants using household services benefits and their observed usage patterns.

16.1.7 For household services, we have separately modelled the number of new claimants and the probability of remaining on benefit for existing and new claimants. New claimants are projected using a claims curve derived from recent experience. Once the number of claimants is established, their future utilisation and average costs are projected. This is then overlaid with mortality. The approach we have used for modelling household services is similar to the methodology used for MRCA medical, as both have ongoing and regular benefit usage. The updated modelling approach and higher experience results in a substantial increase in the number of projected claimants. In addition, higher utilisation rates are adopted, in line with recent experience, and result in claimants being projected to remain on benefits over a long period.

16.1.8 A provision for the IL backlog was also included in our modelling by adjusting the claims curve of new entrants and an explicit allowance for the existing number of open claims. Similar to

the methodology used in the other benefit types, the new claimant claims curve was scaled upwards based on the theoretical number of IL accepted claims and a conversion rate between accepted IL claims to new household services claimants. Using the conversion rate between accepted IL claims and household services claimants, a provision was also calculated for the existing number of open IL claims. These claims were included in financial years 2023–24 and 2024–25. This is broadly in line with DVA's expected backlog clearance target based on the DDFM.

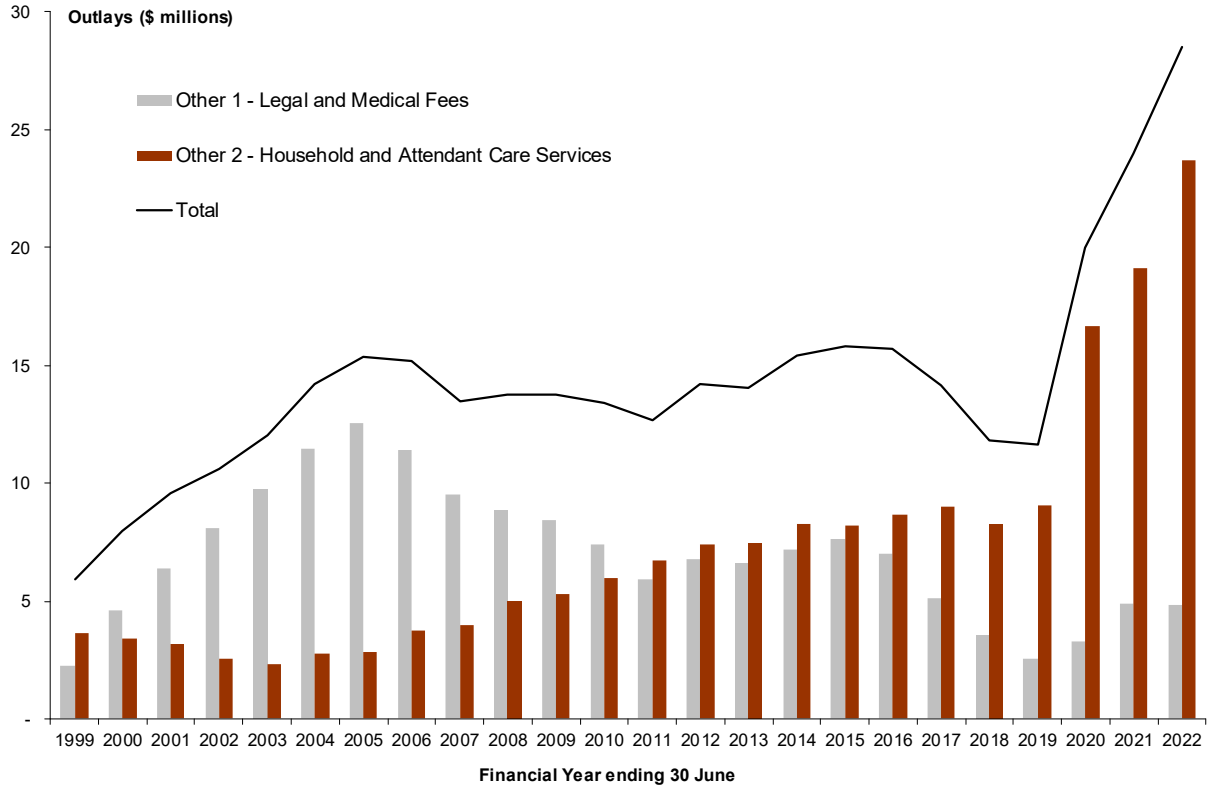
16.1.9 The projected household services cashflows are then grossed up to account for other payments within the Other 2 category.

16.2 Recent Experience and Valuation Assumptions

16.2.1 Figure 16.1 shows the expenditure on other payments since 2000, split between Other 1 and Other 2. DRCA Other 1 expenditure underwent rapid growth in the years leading up to the introduction of MRCA. This was probably attributable to the influx of claims for liability and then permanent impairment, both of which will generally involve medical examinations. Since that time, Other 1 expenditure has experienced a succession of fluctuations, marked by both decreases and increases, before increasing and stabilising again in recent years. The stabilisation is due to the offsetting between the increase in medical examination expenditure and the decrease in legal expenses. When compared to past trends and expenditure for Other 2, however, Other 1 payments have remained low. The decrease in Other 1 payments compared to the past had been driven primarily by a significant reduction in the number of claims for medical exam costs. This could be a result of the change in medical evidence requirements moving from specialist reports to GP reports for claims.

16.2.2 By contrast, Other 2 expenditure has drastically increased in recent years. In particular, the most recent 3 years saw a significant surge in outlays, driven by the higher number of recipients in household services.

Figure 16.1: Expenditure on DRCA other payments by category



16.2.3 Figure 16.2 shows the raw data on the numbers of claim per unit of exposure for medical examinations and the selected assumptions. Figure 16.3 shows the equivalent information for legal expenses. We have set our assumptions for the current valuation in line with experience over the 2022 calendar year.

Figure 16.2: Number of claimants per unit of exposure – category 1, medical examinations (DRCA)

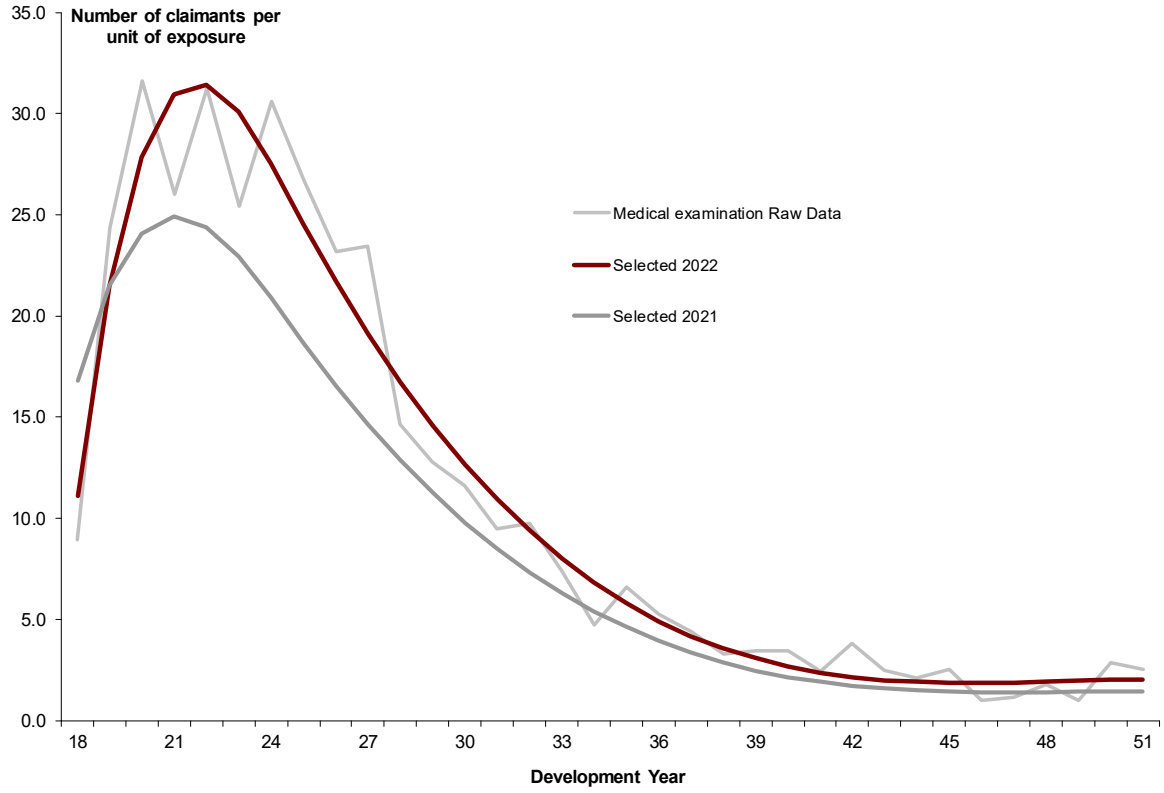
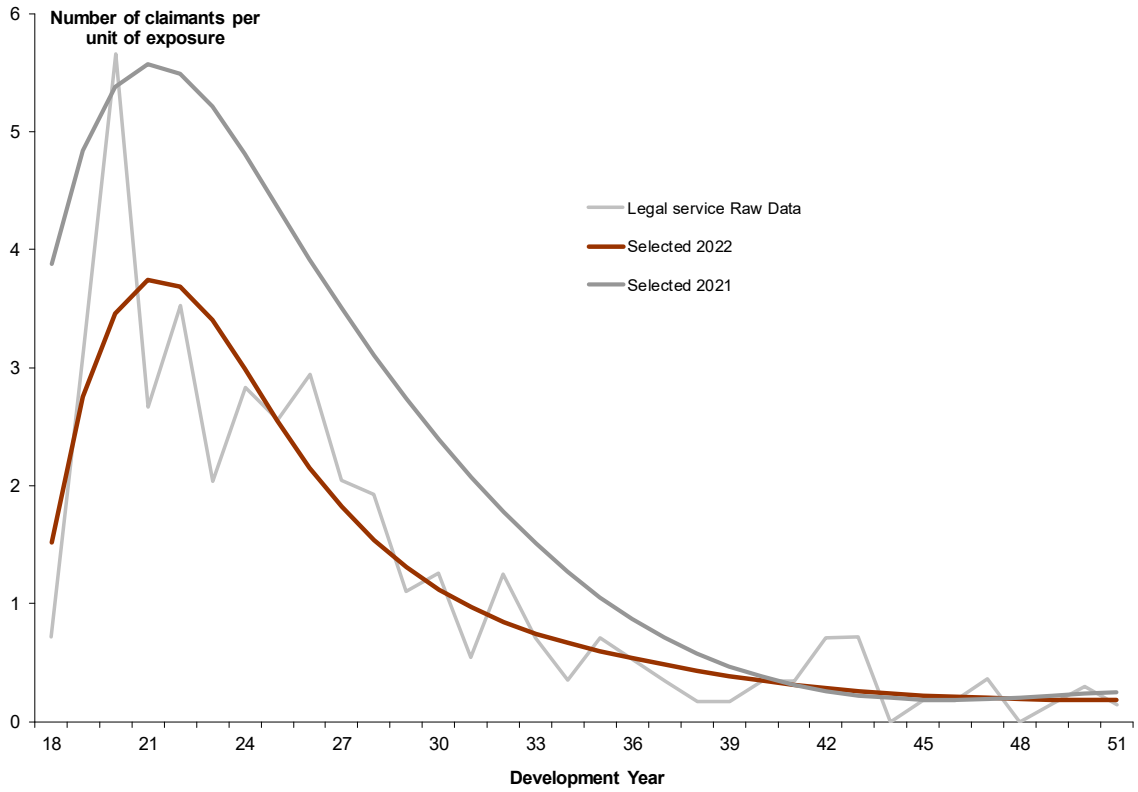
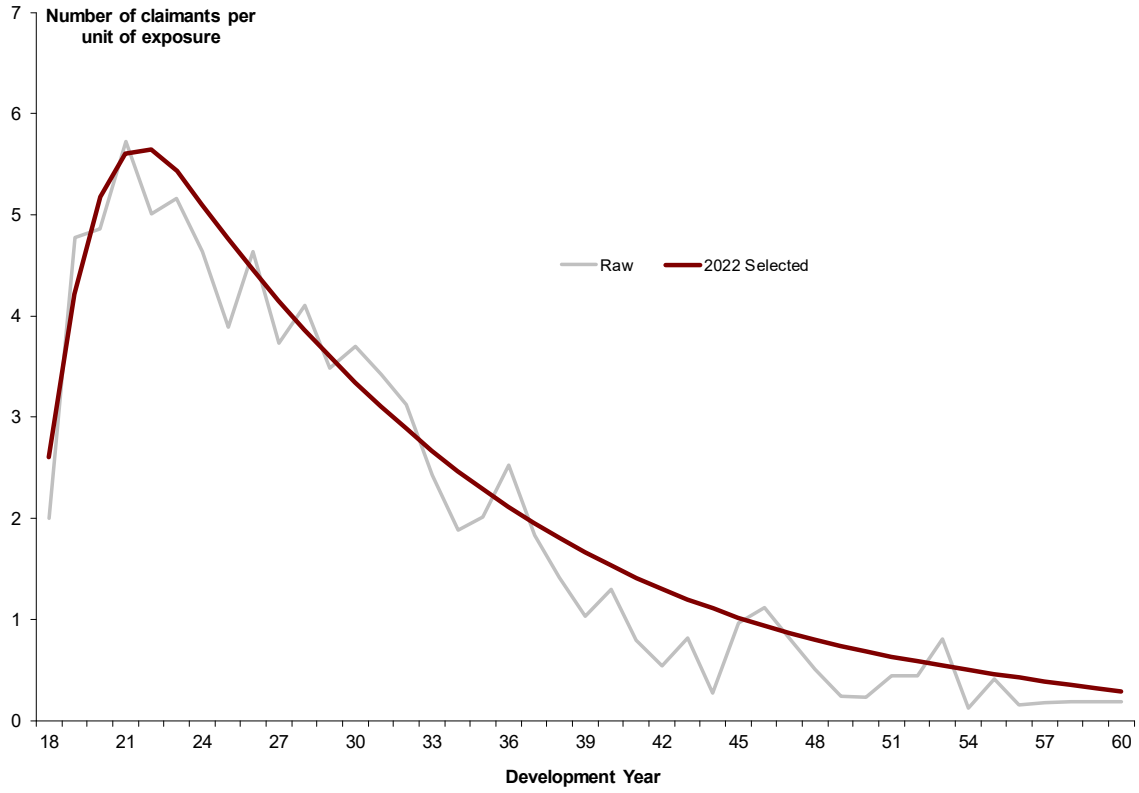


Figure 16.3: Number of claimants per unit of exposure – category 1, legal expenses (DRCA)



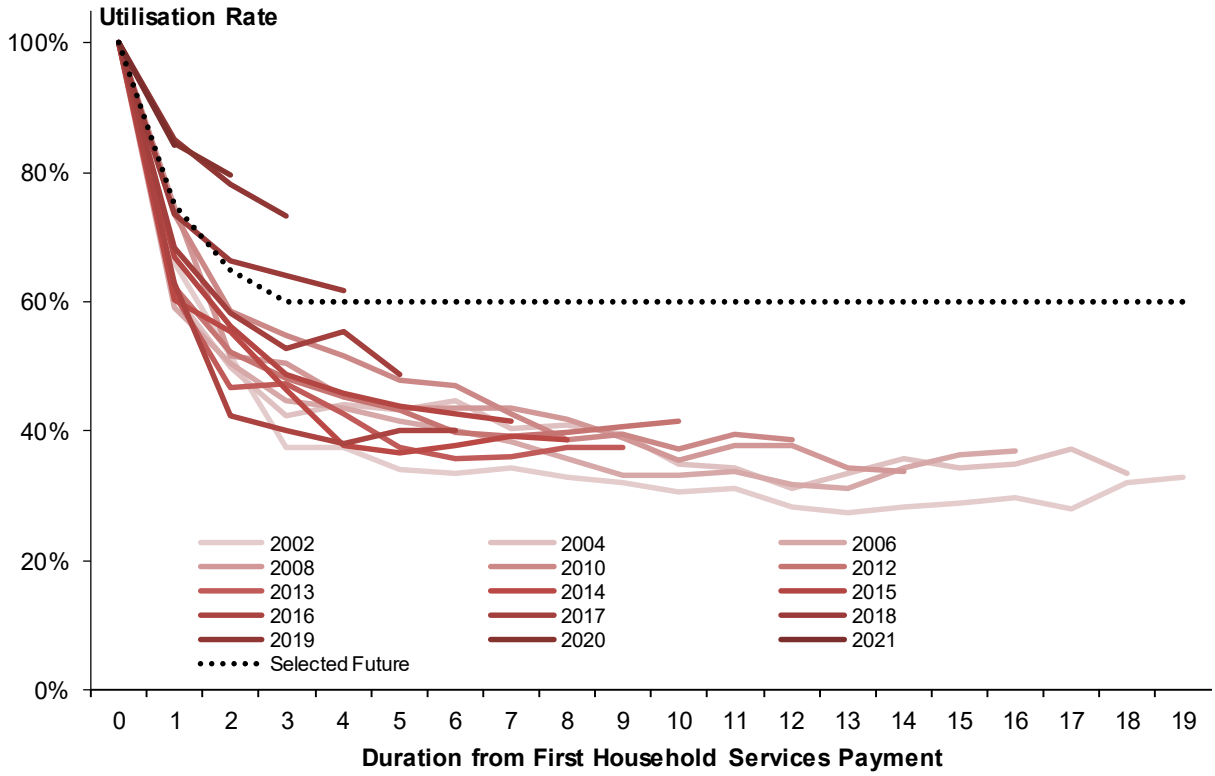
16.2.4 Figure 16.4 shows the raw data on the numbers of new claim per unit of exposure for household services and the selected assumptions. We have set our assumptions for the current valuation in line with experience over the 2022 calendar year. This highlights that an influx of new claimants is expected, as awareness of the associated benefits continues to expand.

Figure 16.4: Number of new claimants per unit of exposure – category 2, household services (DRCA)



16.2.5 The utilisation rates by duration and first payment year for household services benefits are shown in Figure 16.5. Utilisation rates begin at 100 per cent by definition and decrease to 75 per cent at duration 1 e.g. if 100 new claimants accessed benefits for the first time in 2022, we would anticipate 75 to continue accessing benefits one year later, in 2023. Utilisation rates show an increasing trend in recent payment years, particularly since the introduction of Veteran Centric Reform and the 2019 policy changes. However, it is also important to note that there is limited experience for new claimants from recent years and there remains uncertainty in how utilisation experience might emerge over the long term. In light of recent experience, for new claimants we have set a long term utilisation rate assumption of 60 per cent which is reached by duration 3. That is, all claimants remaining after 3 years of usage will only exit from household services benefits as a result of mortality.

Figure 16.5: Utilisation rates – category 2, household services (DRCA)

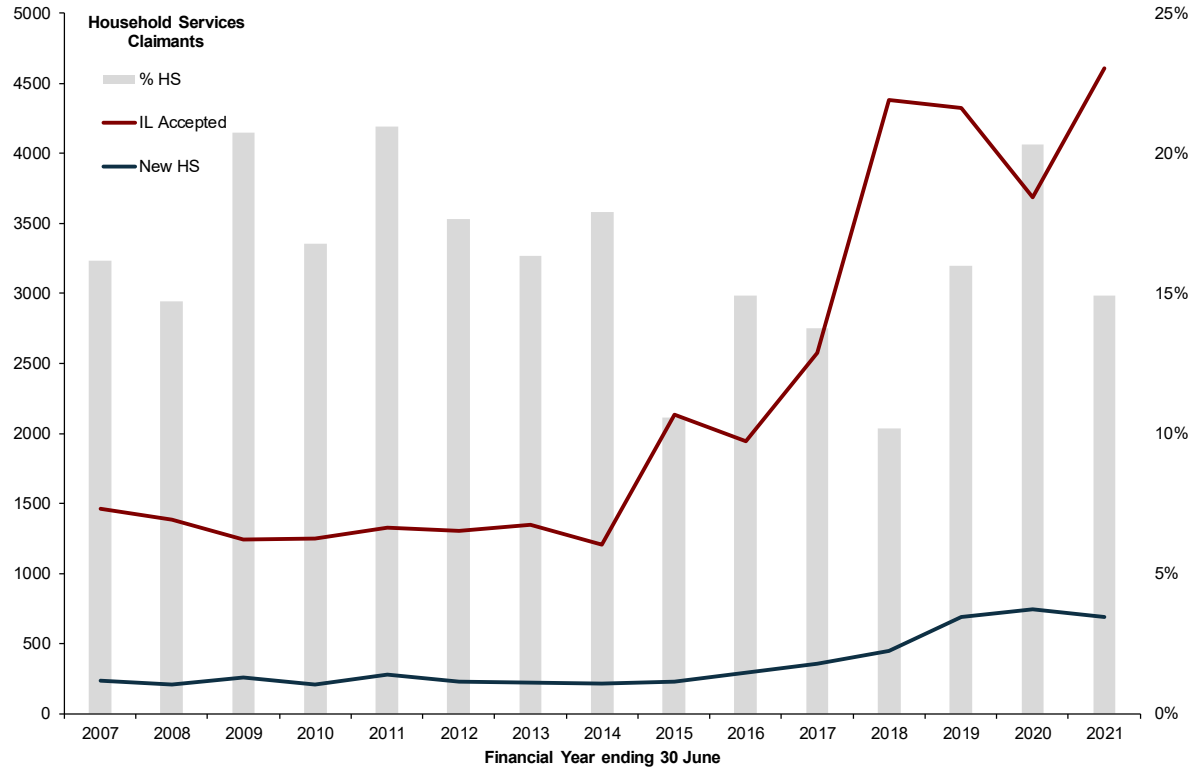


16.2.6 The adopted average sizes are $1,300 per claim for medical examinations and $6,275 per claim for legal expenses. This compares to the respective assumptions of $925 and $6,750 in the 2021 valuation. The selected average sizes in this valuation have been set with reference to the most recent calendar year of experience.

16.2.7 The average cost of household services benefits was set at $5,500, based on the most recent calendar year of experience. For new claimants, we assume entry occurs in the middle of the year, thus 50 per cent of the selected average size is applied in the first year.

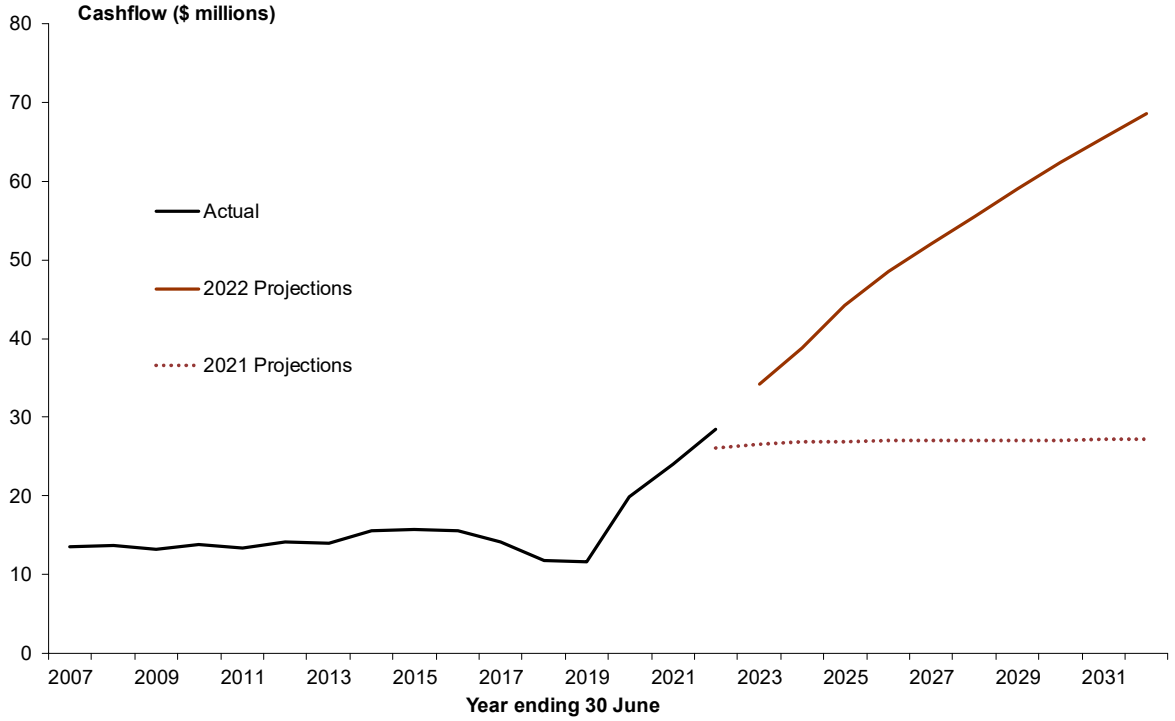
16.2.8 Figure 16.6 below shows the number of accepted IL claims and new household services claimants over time, as well as the conversion rate between the two. We have selected a conversion rate of 15 per cent based on recent experience which translates to a scaling factor of 16 per cent to our selected new entrant claims curve. We have spread the scaling factor over a 3 year period to align with the increase in processing capacity as projected by DVA's DDFM model such that the ultimate rate of new claims applies from 2025–26 onwards. Using the same transition rates, a provision was also calculated for the existing number of open IL claims. These have been included in the 2023–24 and 2024–25 financial year cashflows to broadly align with DVA's DDFM projections.

Figure 16.6: Number of IL Accepted, household services claimants and conversion rate (DRCA)



16.2.9 Figure 16.7 shows actual outlays over the last decade together with projected cashflows for the next 10 years. The significant increase in the projected cashflows is driven by the modelling change to household services and the adjustment for the IL claims backlog.

Figure 16.7: Historical and projected other payments



16.3 Liability Estimate

16.3.1 Table 16.1 shows the estimate of the liability in relation to Other payments broken down by year of accident. The expected liability as at 30 June 2022 from the 2021 valuation was $446.7m. The liability at this valuation is $1,216.4m, a significant increase of $769.7m driven by changes in the recent experience and modelling of household services benefits.

Table 16.1: Outstanding claims liability for other payments by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) ($ m)
1979 and before	75.5
1980 – 1984	68.6
1985 – 1989	134.1
1990 – 1994	227.5
1995 – 1999	331.0
2000 – 2004	379.7
Total	**1,216.4**
Expected at 30/06/2022	*446.7*
Total (30/06/2021)	**451.0**

16.3.2 Table 16.2 reconciles the liability estimate with the corresponding estimate at the previous valuation.

Table 16.2: Reconciliation of liability for other payments

	$m
Liability estimate at 30/06/21 (previous report)	451.0
Assumed Interest	21.9
Projected Payments	(26.2)
Notional Premium	0.0
Projected liability as at 30 June 2022 (previous valuation)	446.7
Experience effects and Assumption changes	
difference between actual and projected payments	(2.3)
change in experience	9.1
change in claimant projection	0.9
change in average cost approach/assumption	146.0
change to model	556.1
backlog adjustment	121.9
change in inflation assumption	(61.8)
Current Estimate	**1,216.4**

17 Valuing Non-Incapacity Payments – MRCA Other Payments

17.1 Modelling Approach

17.1.1 As with DRCA Other payments, we have separately modelled the expenditure under the Other 1 and Other 2 categories. For the Other 1 category, which relates primarily to medical exams, we modelled claimants per unit exposure based on MRCA experience for the development years for which data is available. For the later development years, we used an average of pre-closure and current DRCA experience adjusted to take account of the fact that recent DRCA experience may not be representative of future MRCA experience. A cubic spline was then fitted to the adjusted data.

17.1.2 Based on advice from DVA, nominals 65500 and 65600 were reallocated to the MRCA Other 1 medical exams category this year from MRCA medical payments. This is discussed in section 4.2.11.

17.1.3 For the Other 2 category, the same modelling approach we have implemented in DRCA has also been applied to MRCA. This includes the projection of new claimants, utilisation of services over time, and average cost of services. The model update in MRCA has had a substantial impact on the liability driven by a significant number of new claimants and claimants remaining on benefits for a long period of time.

17.1.4 The claims curve for new claimants of Other 2 household services is constructed in the same way as in MRCA Other 1. That is, for later development years, we blend the pre-closure MRCA and current DRCA experience to derive the long-term experience. A cubic spline was subsequently fitted to the adjusted data.

17.1.5 Historically, we have applied a margin to household services and attendant care to account for the other payments in the Other 2 category. This year, we have separately modelled death related payments to address the increasing trend observed in recent years. The majority of death related payments were linked to the education scheme expenses paid to eligible dependents of ex-service personnel who meet certain criteria. These include eligibility for the Special Rate Disability Pension; or impairment resulting in 80 or more impairment points; or had a service-related death. We have reallocated payments as a result of service-related death to Death payments (discussed in chapter 15). For the remaining education scheme related payments, we have aligned the expected number of new claimants with projected PI claimant numbers. This aligns with the eligibility criteria of 80 or more impairment points.

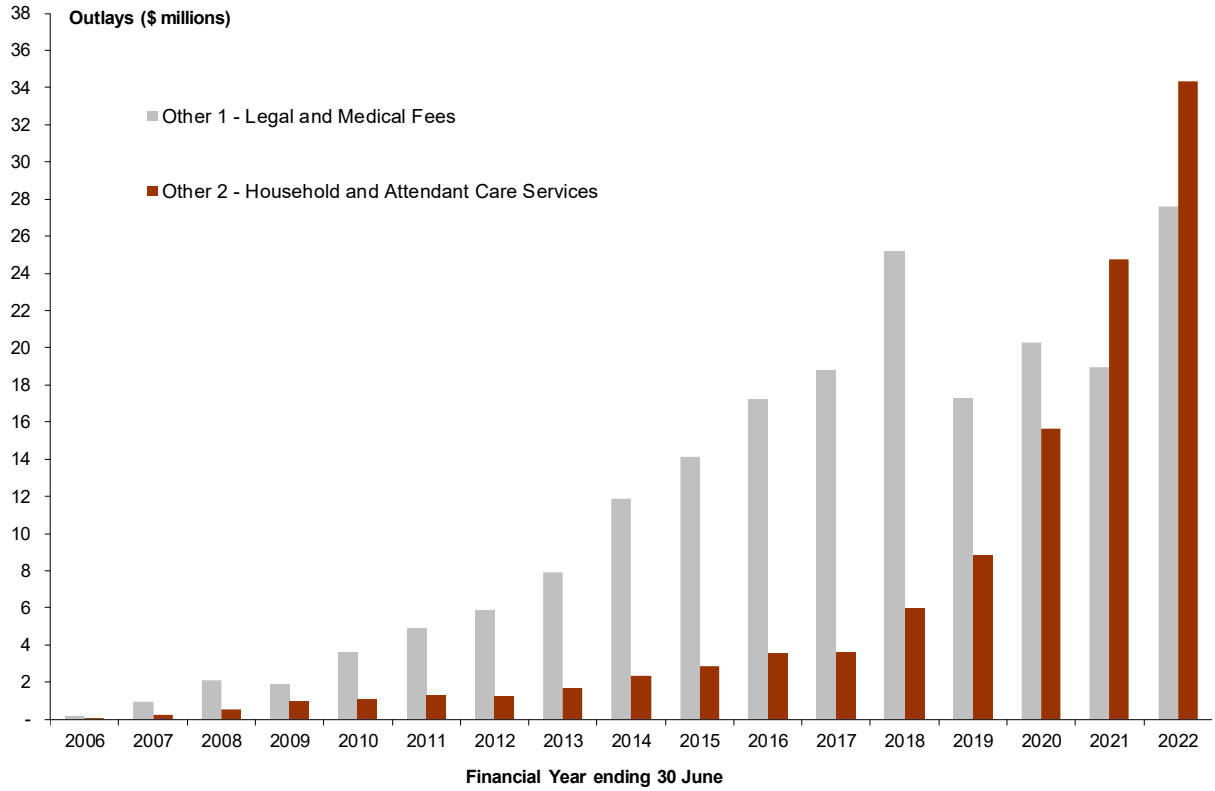
17.1.6 There are a number of smaller payments within the Other 2 category. For attendant care, where the nature of usage is most closely linked with household services, we have based its liability on the result for household services. Other payments such as motor vehicle scheme and energy supplements have been included with the education scheme modelling.

17.2 Recent Experience and Valuation Assumptions

17.2.1 Figure 17.1 shows the expenditure on other payments since 2006. It can be seen that Other 1 payments have grown very rapidly over recent years, reflecting the fact that much of this

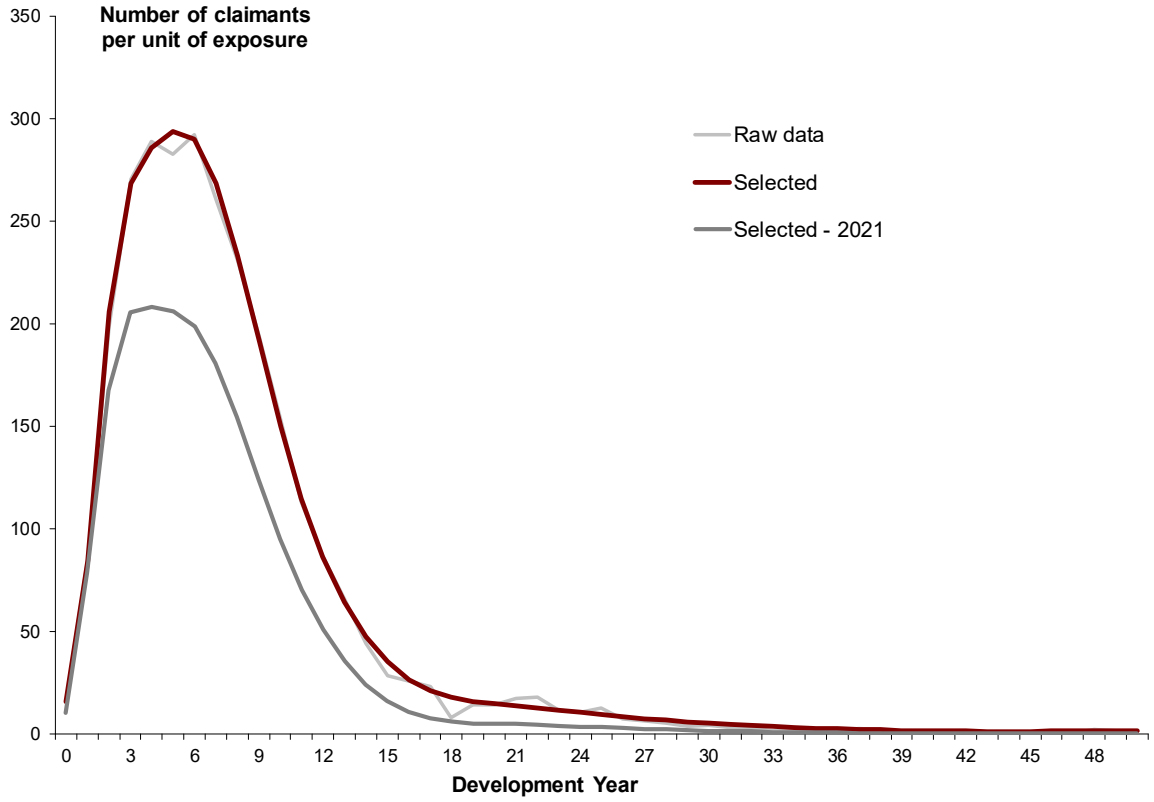
expenditure is associated with medical examinations at the time of claims for initial liability and when assessments of permanent impairment are being made. There was a significant decrease in the Other 1 category in 2019, potentially as a result of DVA moving towards fewer specialist examinations for claims. Expenditure stayed relatively stable for 3 years from 2019 to 2021 before increasing again in 2022. Other 2 payments have continued to grow rapidly over the last few years, with growth in recent years potentially driven by the policy and administrative changes implemented in 2019.

Figure 17.1: Expenditure on other payments by category (MRCA data)



17.2.2 Figure 17.2 shows ultimate assumptions adopted for MRCA Other 1 on numbers of claimants per unit of exposure against the raw data from which these assumptions were derived. There has been a large increase in the number of claimants for MRCA medical examination expenses, mainly driven by the inclusion of the two nominals from medical as mentioned above.

Figure 17.2: Number of claimants per unit of exposure – category 1 other payments (MRCA)



17.2.3 Figure 17.3 shows the claims curve for new claimants for household services for the development years for which data is available. We can observe that household services claimant numbers have seen rapid growth from 2016 to 2021. The experience stabilised in 2022, potentially as a result of processing constraints in the initial liability space. Figure 17.4 shows the selected assumptions and raw data for all development years.

Figure 17.3: Number of new claimants per unit of exposure by calendar year – category 2 other payments (MRCA)

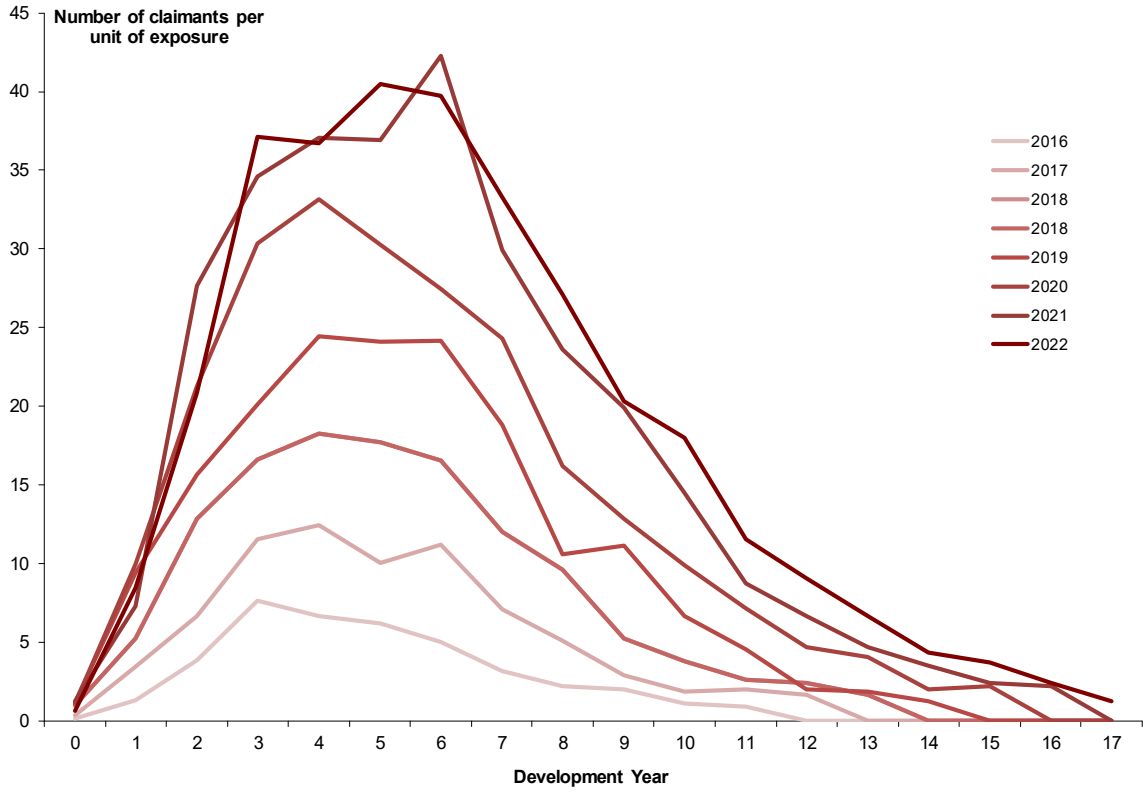
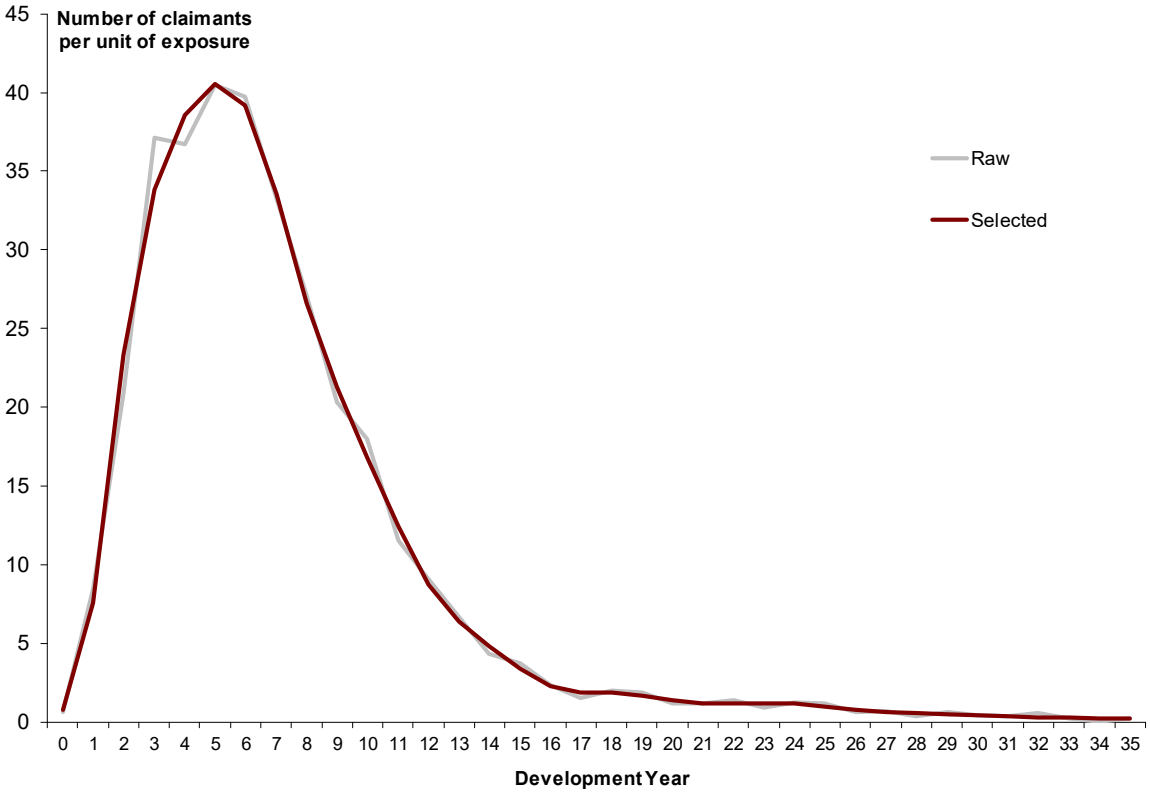
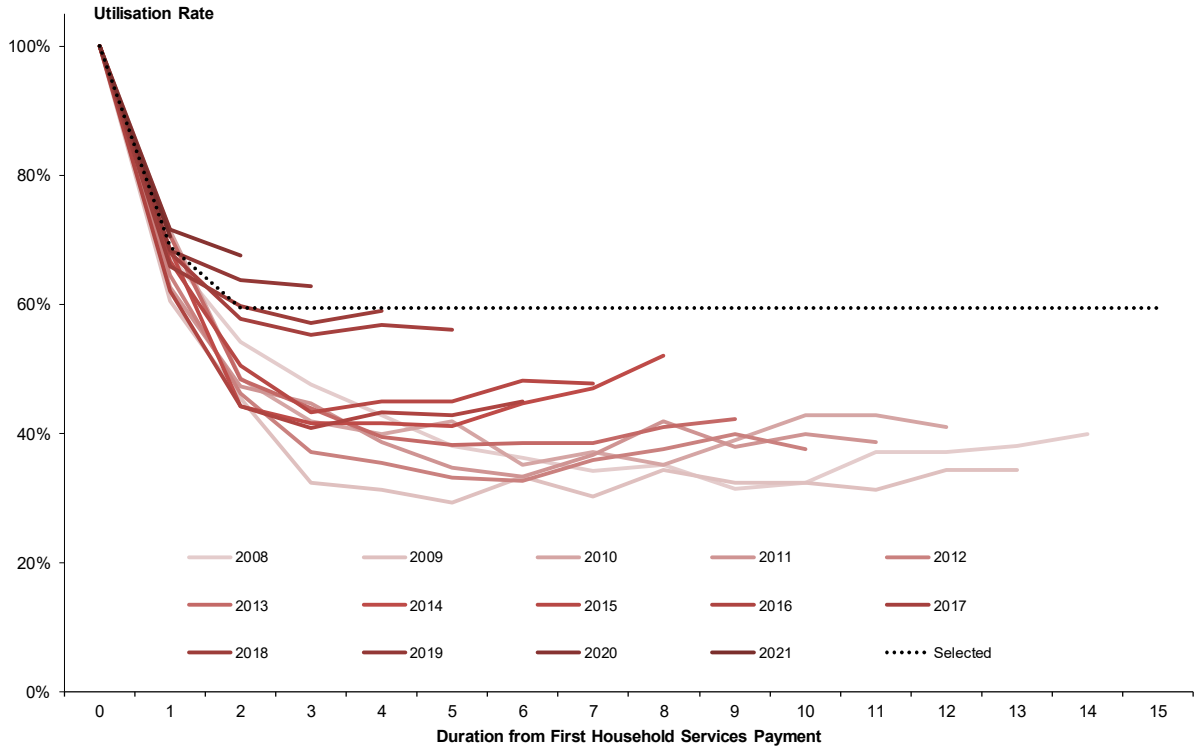


Figure 17.4: Number of new claimants per unit of exposure – category 2 other payments (MRCA)



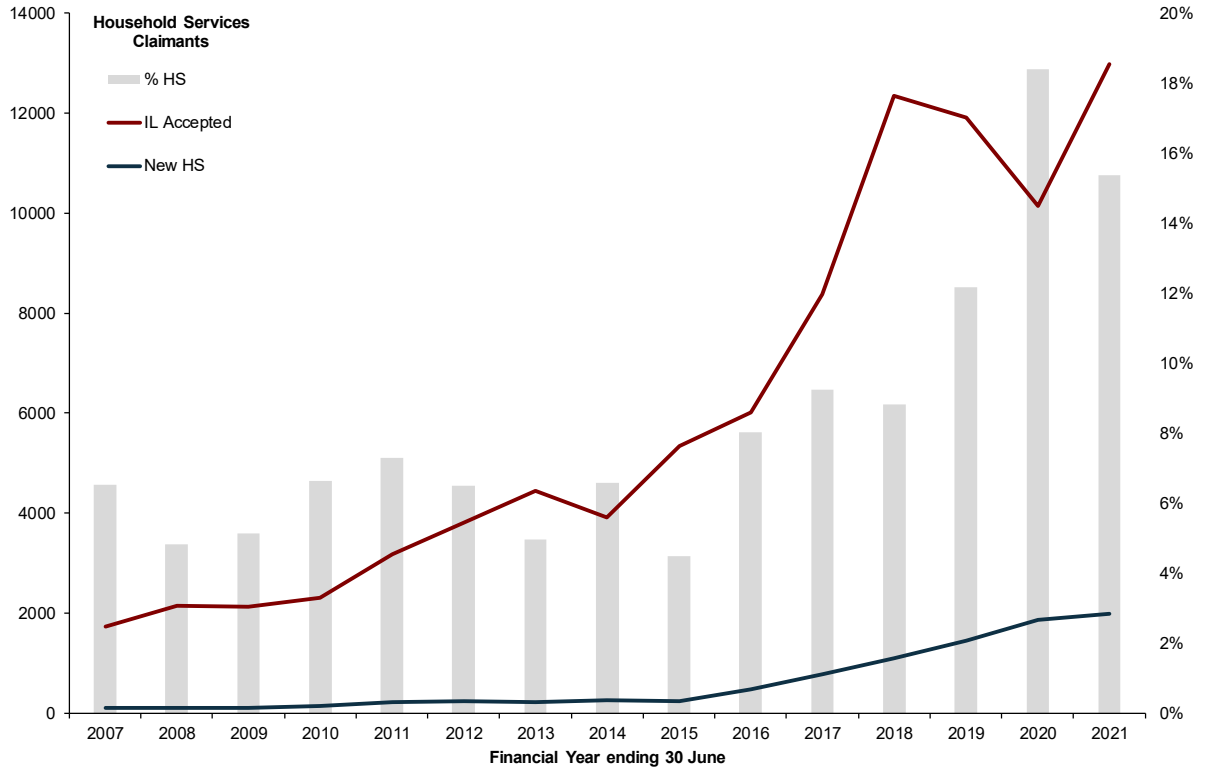
17.2.4 As with DRCA Other 2 household services, we have also analysed the utilisation rates for existing claimants in the scheme. Figure 17.5 shows the historical utilisation rates and the selected assumption for future claimants. We have assumed that 59 per cent of the new claimants each year will transition to become long-term claimants.

Figure 17.5: Utilisation rates – category 2 other payments – household services (MRCA)



17.2.5 Figure 17.6 below shows the number of accepted IL claims and new household services claimants over time, as well as the conversion rate between the two. We have selected a conversion rate of 15 per cent based on recent experience which translates to a scaling factor of 20 per cent to our selected new entrant claims curve. We have also spread the scaling factor over a 3 year period to align with the increase in processing capacity as projected by DVA's DDFM model such that the ultimate rate of new claims applies from 2025–26 onwards. Using the same transition rates, a provision was also calculated for the existing number of open IL claims. These have been included in the 2023–24 and 2024–25 financial year cashflows to broadly align with the DDFM's projections.

Figure 17.6: Number of IL Accepted, household services claimants and conversion rate (MRCA)



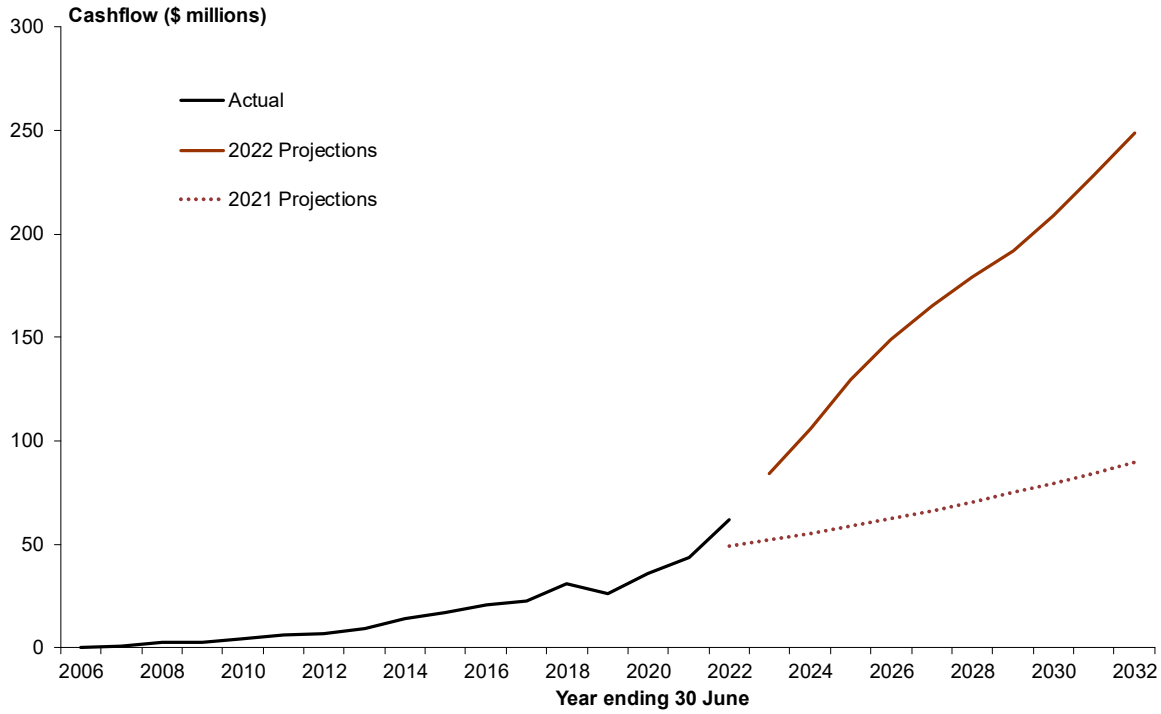
17.2.6 We have modelled the number of new claimants for death related payments[8] as a proportion of PI claimants. The selected proportion of 11 per cent is based on the latest year of experience. For claimants receiving education benefits, we have adopted an average length of 3.5 years on benefits based on historic experience. The backlog adjustment in PI was also carried through to account for the higher numbers of PI claimants expected to emerge over the short to medium term and their flow on impact to dependant benefits.

17.2.7 Based on more recent experience, we have increased the average cost for Other 1 to $2,215 from $1,950 per claimant selected at the previous valuation. The average cost assumption for Other 2 household services and education payments have been set at $5,300 and $3,360 respectively. A gross-up factor of 13 per cent has been applied to the household services payments to account for attendant care and 18 per cent to the education payments to account for other payments such as allowances under the motor vehicle scheme.

17.2.8 When these components are combined, we can estimate the total projected payments for future years and compare them against the historical experience as shown in Figure 17.7. The cashflows are significantly higher than those estimated in 2021 due to the experience and model update and reflect the expected high utilisation rates of household services over the long term.

8 Death related payments here differ from those covered in section 15. The payments described here are related to educational and other supplementary benefits provided to dependents of severely injured veterans.

Figure 17.7: Historical and projected other payments



17.3 Liability Estimate

17.3.1 Table 17.1 shows the estimate of the liability in relation to other payments broken down by year of accident. The liability as at 30 June 2022 is $3,058.7m. This compares to an expected projected liability of $769.3m from the 2021 valuation and is primarily driven by the change in modelling approach for household services in response to changing experience.

Table 17.1: Outstanding claims liability for MRCA other payments by year of accident

Year of accident year ending 30 June	Liability (inflated and discounted) ($ m)
2005 – 2009	158.9
2010	69.2
2011	96.6
2012	126.5
2013	155.2
2014	177.4
2015	213.6
2016	245.3
2017	269.8
2018	290.4
2019	304.9
2020	310.3
2021	321.5
2022	319.0
Total	**3,058.7**
Expected at 30/06/2022	*769.3*
Total (30/06/2021)	**730.7**

17.3.2 Table 17.2 reconciles the liability estimate with the corresponding estimate at the previous valuation.

Table 17.2: Reconciliation of liability for other payments

	$m
Liability estimate at 30/06/21 (previous report)	730.7
Assumed Interest	36.6
Projected Payments	(49.5)
Notional Premium	51.5
Projected liability as at 30 June 2021 (previous valuation)	769.3
Experience effects and Assumption changes	
difference between actual and projected payments	(12.5)
change in experience	140.8
change in claimant projection	227.6
change in average size assumption	452.1
model update	1,243.1
backlog adjustment	428.9
change in inflation assumption	(190.7)
Current Estimate	**3,058.7**

18 Summary of results for non-incapacity payments

18.1 Liability as at 30 June 2022

18.1.1 The following tables combine the results reported in the previous sections to give a total liability for all non-incapacity payments across both schemes. Table 18.1 summarises the liability estimates described in the previous sections.

Table 18.1: Outstanding claims liability for non-incapacity payments as at 30 June 2022

Payment Type	Liability (inflated and discounted)	
Permanent Impairment[9]	13,676.4	42%
Medical Expenses	13,693.5	42%
Rehabilitation Costs	619.0	2%
Benefits Payable on Death[10]	449.9	1%
Other[11]	4,275.0	13%
Total	**32,713.9**	**100%**

18.1.2 The projected liability at the previous valuation for 30 June 2022 is $24,192.5m. The liability at this valuation is $32,713.9m. This is approximately $8.5bn higher than was projected at the previous valuation, driven by increases to permanent impairment, medical expenses and other benefits.

18.1.3 The liability estimates were attributed to in proportion to payments made during the last 3 financial years.

9 Includes non-economic loss payments.

10 Includes lump sums and fortnightly payments to dependent children.

11 Household services, attendant care, travel, legal costs, general services/medical examinations, surveillance, damage to property and funeral expenses.

Table 18.2: Outstanding claims liability for non-incapacity payments as at 30 June 2022 – by head of damage and service arm

	Liability (Inflated and Discounted) $ m			
Payment Type	**Army**	**Navy**	**RAAF**	**Total**
PI and NEL	9,266.4	2,380.1	2,029.9	13,676.4
Medical Expenses	9,689.1	2,073.0	1,931.5	13,693.5
Rehabilitation Costs	441.0	101.5	76.5	619.0
Death Benefits	144.5	190.5	114.9	449.9
Other	2,825.4	784.5	665.2	4,275.0
Total	**22,366.3**	**5,529.6**	**4,818.0**	**32,713.9**

18.1.4 Approximately 68 per cent of the liability is estimated to arise from injuries to Army personnel, while the Navy and RAAF contribute around 17 per cent and 15 per cent respectively.

18.2 Projected Cashflows

18.2.1 Cashflows have been projected for the following decade allowing for future injuries. Table 18.3 shows the projected cashflows in respect of injuries sustained before the valuation date under DRCA, while Table 18.4 shows the cashflows arising from injuries sustained before the valuation date under MRCA.

18.2.2 Table 18.5 shows the projected cashflows for injuries occurring after 30 June 2021. Note that all figures are in nominal dollars, that is, they have not been discounted to 2021 dollars.

Table 18.3: Projected non-incapacity payments for DRCA claims incurred as at 30 June 2022

	Payments (future dollars) $ m					
Year ending 30 June	**PI and NEL**	**Medical Expenses**	**Rehab**	**Death**	**Other[12]**	**All[13]**
2023	180.8	8.5	11.8	47.4	34.2	282.7
2024	564.5	7.8	11.7	45.0	38.9	667.9
2025	596.9	7.3	11.1	44.0	44.3	703.5
2026	261.8	6.7	10.4	41.7	48.5	369.0
2027	246.4	6.2	9.0	39.8	52.0	353.4
2028	230.5	5.7	8.3	37.2	55.5	337.3
2029	214.4	5.3	7.6	34.2	59.0	320.5
2030	198.4	4.9	6.9	30.9	62.3	303.4
2031	182.7	4.5	6.3	27.6	65.5	286.5
2032	167.6	4.1	5.7	24.1	68.6	270.1

12 Household services, attendant care, travel, legal costs, general services/medical examinations, surveillance, damage to property and funeral expenses.

13 Excludes incapacity payments.

Table 18.4: Projected non-incapacity payments for MRCA claims incurred before 30 June 2022

	Payments (future dollars) $ m					
Year ending 30 June	**PI**	**Medical Expenses**	**Rehab**	**Death**	**Other**	**All**
2023	1,181.6	208.1	61.1	11.3	84.0	1,546.1
2024	3,011.5	249.5	71.8	5.1	103.9	3,441.8
2025	2,519.8	289.9	70.5	5.1	122.2	3,007.5
2026	1,133.0	328.6	67.0	5.1	131.0	1,664.7
2027	943.2	366.0	53.9	5.0	136.5	1,504.5
2028	762.0	402.6	48.2	5.0	136.5	1,354.3
2029	598.7	438.4	42.0	4.8	133.1	1,216.9
2030	459.0	473.6	35.7	4.8	131.9	1,105.0
2031	345.3	507.4	29.8	4.7	132.5	1,019.7
2032	258.5	541.2	24.7	4.6	133.3	962.4

Table 18.5: Projected non-incapacity payments for MRCA claims incurred after 30 June 2022

	Payments (future dollars) $ m					
Year ending 30 June	**PI**	**Medical Expenses**	**Rehab**	**Death**	**Other**	**All**
2023	43.4	0.6	0.2	6.5	0.4	51.1
2024	182.4	4.5	2.3	13.7	2.4	205.3
2025	384.5	12.6	7.2	14.8	7.5	426.6
2026	617.5	25.2	14.6	16.0	17.7	691.0
2027	860.7	42.6	21.1	17.1	29.0	970.5
2028	1,097.9	64.4	30.8	18.3	42.7	1,254.1
2029	1,316.2	90.6	41.4	19.5	58.7	1,526.3
2030	1,509.5	121.2	52.2	20.8	76.3	1,780.0
2031	1,672.4	155.9	62.9	22.1	95.2	2,008.5
2032	1,804.2	194.8	72.9	23.4	115.0	2,210.5

18.2.3 Figure 18.1 shows this information graphically and Figure 18.2 puts the projection of total non-incapacity payments in the context of historical expenditure.

Figure 18.1: Projected non-incapacity payments

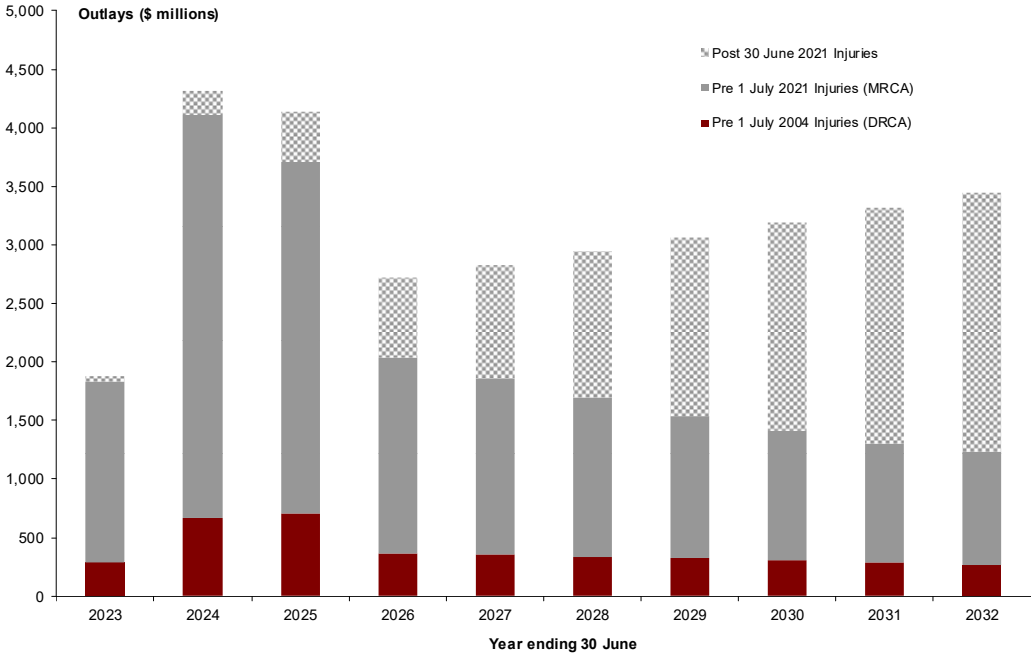
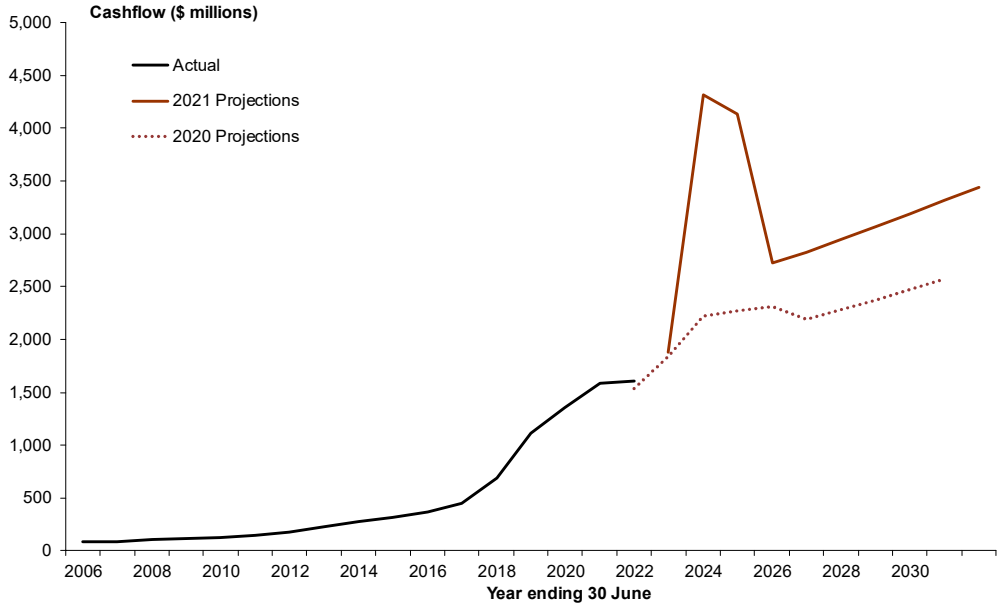


Figure 18.2: Historical and projected non-incapacity payments



18.2.4 The projected cashflows are significantly higher than the previous year projections, driven by increasing expected costs under permanent impairment, medical and other benefits.

19 Summary of overall outstanding liability, cashflows and notional premium estimate

19.1 Summary of Outstanding Claims Liability

19.1.1 Table 19.1 shows the overall outstanding claims liability split between incapacity and non-incapacity payments and by Service Arm.

Table 19.1: Outstanding claims liability as at 30 June 2022 by service arm

Service	Incapacity Payments ($m)	Non Incapacity Payments ($m)	Total ($m)
Army	6,386.8	22,366.3	28,753.2
Navy	1,454.5	5,529.6	6,984.1
RAAF	1,051.8	4,818.0	5,869.8
Total	**8,893.1**	**32,713.9**	**41,607.0**
Total (30/06/2021)	7,753.0	22,483.4	30,236.4

19.1.2 Table 19.2 shows the outstanding claims liability for 2022, and projected for 10 years, split between DRCA and MRCA claims. The proportion of MRCA claim related liabilities are projected to increase from about 85 per cent of the total as at the valuation date to almost 95 per cent by the end of the projection period.

Table 19.2: Outstanding claims liability split between DRCA and MRCA

As at 30 June	DRCA ($m)	MRCA ($m)	Total ($m)
2022	6,408.6	35,198.5	41,607.0
2023	6,360.0	38,461.7	44,821.7
2024	5,903.5	39,809.8	45,713.3
2025	5,375.1	41,647.2	47,022.3
2026	5,150.0	44,799.1	49,949.1
2027	4,912.0	48,065.4	52,977.3
2028	4,674.1	51,439.7	56,113.9
2029	4,434.3	54,915.6	59,349.9
2030	4,192.2	58,493.4	62,685.6
2031	3,948.1	62,176.0	66,124.2

19.1.3 Table 19.3 reconciles the overall liability estimate given in our 2022 report with the current estimate of the outstanding claims liability. In total, the various adjustments made to assumptions have increased the liability by approximately $9bn compared with that projected in the 2021 valuation. The increased liability has primarily been driven by growth medical benefits.

Table 19.3: Reconciliation of overall liability estimate

	$m
Liability estimate at 30/06/21 (previous report)	**30,236.4**
Assumed Interest	1,531.4
Projected Payments	(1,943.7)
Notional Premium	2,735.7
Projected liability as at 30 June 2022 (previous valuation)	32,560.0
Experience effects and assumption changes	
difference between actual and projected payments	(59.8)
change in MRCA PI average cost	1,867.7
change in MRCA PI backlog provision	898.4
change in MRCA medical methodology	4,090.5
change in MRCA medical payment reclassification impact	(2,481.3)
change in MRCA Other	2,301.9
change in DRCA Other	772.0
change in DRCA PI backlog provision	1,411.5
other adjustments	246.2
Current Estimate	**41,607.0**

19.2 Summary of Projected Cashflows

19.2.1 This section combines the projected cashflows for incapacity and non-incapacity payments for the following decade allowing for future injuries. Table 19.4 shows the projected cashflows in respect of injuries sustained before the valuation date under the DRCA, while Table 19.5 shows the cashflows arising from injuries sustained before the valuation date under the MRCA. Table 19.6 shows the projected cashflows for those injuries occurring after 30 June 2022. Note that all figures are in nominal dollars, that is, they have not been discounted to 2022 dollars.

Table 19.4: Projected payments for DRCA claims as at 30 June 2022

Year ending 30 June	Incapacity ($ m)	Non Incapacity ($ m)	Total ($ m)
2023	77.4	282.7	360.1
2024	88.0	667.9	755.9
2025	100.2	703.5	803.7
2026	113.0	369.0	481.9
2027	130.2	353.4	483.6
2028	134.5	337.3	471.8
2029	141.6	320.5	462.1
2030	149.3	303.4	452.7
2031	156.2	286.5	442.7
2032	157.4	270.1	427.5

Table 19.5: Projected payments for MRCA claims incurred as at 30 June 2022

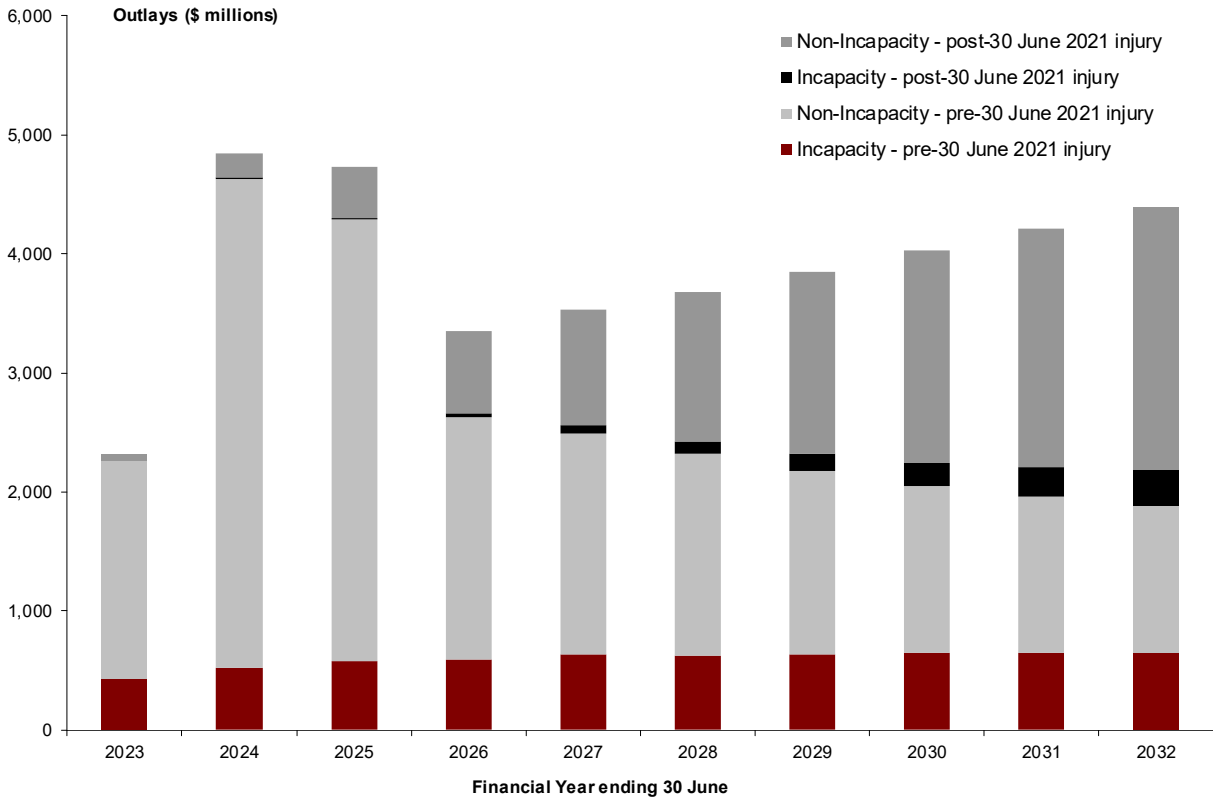
Year ending 30 June	Incapacity ($ m)	Non Incapacity ($ m)	Total ($ m)
2023	361.3	1,546.1	1,907.5
2024	437.4	3,441.8	3,879.2
2025	475.9	3,007.5	3,483.4
2026	476.7	1,664.7	2,141.4
2027	503.7	1,504.5	2,008.2
2028	492.7	1,354.3	1,847.1
2029	494.2	1,216.9	1,711.1
2030	495.8	1,105.0	1,600.8
2031	495.6	1,019.7	1,515.3
2032	491.0	962.4	1,453.5

Table 19.6: Projected payments for MRCA claims incurred after 30 June 2022

Year ending 30 June	Incapacity ($ m)	Non Incapacity ($ m)	Total ($ m)
2023	0.2	51.1	51.3
2024	4.6	205.3	209.9
2025	17.0	426.6	443.6
2026	38.0	691.0	729.0
2027	69.3	970.5	1,039.8
2028	105.2	1,254.1	1,359.2
2029	147.5	1,526.3	1,673.8
2030	196.4	1,780.0	1,976.4
2031	250.1	2,008.5	2,258.5
2032	307.3	2,210.5	2,517.7

19.2.2 Figure 19.1 shows this information graphically.

Figure 19.1: Projected payments



19.2.3 Table 19.7 shows the projected cashflows split between payments made under the DRCA and payments made under the MRCA. Note that all figures are in nominal dollars, that is, they have not been discounted to 2022 dollars.

Table 19.7: Projected payments split between DRCA and MRCA injuries

Year ending 30 June	Incapacity		Non Incapacity		Total	
	DRCA ($ m)	MRCA ($ m)	DRCA ($ m)	MRCA ($ m)	DRCA ($ m)	MRCA ($ m)
2023	77.4	361.6	282.7	1,597.2	360.1	1,958.8
2024	88.0	442.0	667.9	3,647.1	755.9	4,089.1
2025	100.2	492.9	703.5	3,434.1	803.7	3,927.0
2026	113.0	514.7	369.0	2,355.7	481.9	2,870.4
2027	130.2	573.0	353.4	2,475.0	483.6	3,048.0
2028	134.5	597.9	337.3	2,608.4	471.8	3,206.3
2029	141.6	641.7	320.5	2,743.3	462.1	3,384.9
2030	149.3	692.2	303.4	2,885.0	452.7	3,577.1
2031	156.2	745.6	286.5	3,028.2	442.7	3,773.8
2032	157.4	798.3	270.1	3,172.9	427.5	3,971.2

19.3 Estimated Notional Premium

19.3.1 The notional premium is an estimate of the lifetime compensation cost of work related injuries occurring during 2022–23. It is the amount which if paid over the course of the year, together with assumed investment income, would be sufficient to meet the eventual claim costs arising from injuries which occur during 2022–23 if experience unfolded in line with the valuation assumptions. The notional premium for 2022–23 relates entirely to MRCA claims. It is important to note the distinction between the notional premium for 2022–23 and the actual claim payments which will be made during 2022–23.

19.3.2 It is convenient to break the notional premium into the same components as the outstanding claims liability. The components of the notional premium include the cost of:

- incapacity payments;
- permanent impairment and non-economic loss lump sums;
- medical expenses;
- rehabilitation;
- death and payments to dependent children; and
- other benefits;

that is attributable to claims arising from service rendered during 2022–23.

19.3.3 The estimate of the notional premium is calculated as the present value of the cashflows arising from the 2022–23 accident year adjusted for half a year's interest to give the amount that would need to be paid over the course of 2022–23.

19.3.4 Administration costs have not been included for this review, as they are considered outside the scope of the review itself.

19.3.5 Table 19.8 sets out the estimates of the notional premium, broken down by Service Arm, and by payment type. The notional premium for 2022–23 is $3,425.9m. This compares to the estimated notional premium at the previous valuation of $2,735.7m.

Table 19.8: 2022–23 notional premium by service and payment type

Payment Type	ARMY ($ m)	NAVY ($ m)	RAAF ($ m)	Total ($ m)
Long-Term Incapacity	319.9	72.4	52.5	444.8
Short-Term Incapacity	76.7	17.7	12.7	107.0
Permanent Impairment	959.6	246.5	210.2	1,416.2
Medical	755.7	161.7	150.6	1,068.0
Rehabilitation	45.3	10.4	7.9	63.6
Death	8.6	11.3	6.8	26.7
Other	197.9	55.0	46.6	299.5
Total	**2,363.6**	**574.9**	**487.4**	**3,425.9**
Total (30/06/2021)	1,893.3	458.4	384.0	2,735.7

19.3.6 Table 19.9 shows the overall notional premium estimates, expressed as percentages of the total military salary expenditure expected to be paid during 2022–23. Salary estimates for this review were provided by Defence.

Table 19.9: 2022–23 notional premium by service (percentage of salary)

	ARMY	NAVY	RAAF	Total
Notional Premium ($ m)	2,363.6	574.9	487.4	**3,425.9**
Forecast salaries 2022–23 ($m)	3,081.7	1,847.5	1,722.2	**6,651.4**
Notional Premium (%)	76.7%	31.1%	28.3%	**51.5%**

19.3.7 Defence advised overall estimated salaries of approximately $6.7bn for 2022–23. This was around $168m higher than the salary roll for 2021–22, an increase of 2.6 per cent. The notional premium has increased by around 20 per cent and this has resulted in an increase in the premium expressed as a percentage of salary of approximately 9 percentage points. Most of the premium is attributable to the Army, which accounts for over 70 per cent of the total premium.

20 Scenario Analysis

20.1 Background

20.1.1 As discussed throughout the report, there remains great uncertainty in estimating the MCS liability. The very long term over which these liabilities will be paid out makes the results very sensitive to relatively small changes in assumptions. Interpreting experience in an environment with rapidly changing experience also has significant challenges. We have included a range of sensitivity tests and scenarios to show the impact of changes in key modelling assumptions and the impact of wider scheme experience changes. Please note that the sensitivities and scenarios included in this section are a subset of possible outcomes and are not intended to be an exhaustive list of all possible future outcomes. The results are not intended to represent lower and upper bounds to all possible future outcomes.

20.1.2 As noted in section 5.3, the choice of the interest rate used to discount future cashflows to determine the present value of liability has a major impact on the results. This is the result of the very long time period over which payments are projected combined with the relatively high rates of payment inflation.

20.1.3 We have taken the view that changes in the interest rate from year to year have the potential to confuse rather than clarify understanding of the trends in the experience. However, for financial statement purposes an estimate of the liability based on prevailing yields on Commonwealth securities is required. In providing advice for the 2022 DVA financial statements, therefore, we discounted the cashflows generated by the 2021 model using a yield curve for Commonwealth securities as at 30 June 2022. We have recalculated the liability based on the cashflows from the current valuation using that same yield curve.

20.1.4 There is considerable uncertainty in modelling MRCA permanent impairment payments as a result of significant changes in experience and uncertainty regarding potential increases to DVA's internal processing capacity. As a result of several administrative initiatives taking place over this period, the level of claims has changed year on year and it is too early in the process to ascertain what a stable environment might look like. There is also considerable uncertainty regarding annual administrative funding which influences the rate at which the existing initial liability and PI claims backlog might be cleared. As such, we have included scenarios with different resulting PI claims from the backlog to illustrate the impact on the liability.

20.1.5 One of the largest contributors to the increase in the PI liability this year was the change in average size of lump sum payments. There remains uncertainty as to whether the most recent experience will continue over the long term. We have included the resulting liability should average size be higher or lower than the selected assumption.

20.1.6 For the modelling of incapacity payments, there are a range of assumptions required on transition rates from short-term to long-term incapacity and age based exit rates. We have included the results from sensitivity testing on the key assumptions in the modelling.

20.1.7 One key assumption in arriving at an estimate of the medical liability as at 30 June 2022 was the proportion of future expenditure that might relate to claims occurring before the valuation date. The data on health care expenditure makes it impossible to model this directly and we have instead used information on distributions of claims to approximate a split. To illustrate

the impact of this assumption, we have included the liability that would have been calculated if we assumed that all of the expenditure arising from those who have had at least one claim prior to the valuation date contributed to the liability.

20.1.8 As medical payments continue for a substantial length of time, there is significant uncertainty around the long term experience. The MRCA scheme currently has 18 years of data but medical payments can continue for 60 or more years. The assumptions in the valuation have been based on the experience to date but long term experience for claimants could vary from current experience. As such, we have also included a range of scenarios around the key assumptions to show the impact of these on the liability.

20.1.9 An update to the model used for household services was implemented at this year's valuation. We have included a sensitivity analysis on some of the key assumptions within the model to illustrate their impacts on the liability. Scenarios around the backlog provision have also been included.

20.1.10 Finally, we have included additional scenarios on the total exposure of MRCA claimants and how the liability might change based on different ultimate utilisation assumptions across the 3 major benefit types.

20.2 Results

Discount Rate Scenario

20.2.1 The following table shows the liabilities as at 30 June 2022 by head of damage and Act using the yield curve adopted for the 2021–22 financial statements.

Table 20.1: Estimated liability using 2022 yield curve

Payment Type	DRCA ($ m)	MRCA ($ m)	Total ($ m)
Long-Term Incapacity	1,621	7,486	9,107
Short-Term Incapacity	184	858	1,042
Total Incapacity	**1,805**	**8,344**	**10,149**
Permanent Impairment	3,339	11,365	14,704
Medical	73	17,745	17,818
Rehabilitation	106	571	678
Death	391	109	500
Other	1,458	3,791	5,250
Total Non-Incapacity	**5,367**	**33,583**	**38,949**
Total	**7,171**	**41,927**	**49,098**

20.2.2 The total liability increases by $7.5bn when the yield curve is used, relative to the results using the 5 percent discount rate. The items which are most sensitive to the change in discount rate are the medical and long-term incapacity (which includes the IBNR liability) categories. These payments have a thicker 'tail' than other heads of damage in terms of the pattern of cashflows. The least sensitive heads of damage are death claims under DRCA and short-term incapacity, where the cashflows are expected to be concentrated in the short to medium term.

20.2.3 Cashflows are not affected by the choice of discount rate but the notional premium is. Using the yield curve, the calculated notional premium increases by $681m to $4.1bn.

Permanent Impairment Scenarios

20.2.4 The two main drivers of the liability increase in MRCA permanent impairment at this year's valuation have been the increase in average size of lump sum payments and the adjusted provision for the IL and PI backlogs. There remains significant uncertainty as to how experience will emerge in the long term. We have provided scenarios to illustrate the impact on the liability should average size be different to that selected or the provision for the backlog be lower or higher than expected. The results are included in Table 20.2 below.

Table 20.2: MRCA Permanent impairment liabilities under modelled scenarios

Scenario	Description	MRCA PI Liability ($ m)	Change in Liability ($m)	% Change
Base		10,619		
1	Warlike/Non-Warlike ratio remains at current levels	10,270	(348)	(3.3%)
2	Impairment point distribution based on most recent 3 years of data	9,522	(1,096)	(10.3%)
3	Impairment point distribution based on most recent 6 months of data	11,416	797	7.5%
4	Lower backlog assumptions IL acceptance rate: 85% IL to PI conversion: 90% PI acceptance rate: 85%	9,180	(1,439)	(13.6%)
5	Higher backlog assumptions IL acceptance rate: 95% IL to PI conversion: 100% PI acceptance rate: 90%	11,604	985	9.3%

Incapacity Scenarios

20.2.5 The main drivers for the Incapacity liability are exit rates, probabilities of transitioning to a long termer and average size assumptions. We have provided scenarios to illustrate the impact on the liability should these drivers be different to what was assumed.

20.2.6 There also remains uncertainty around the conversion of initial liability claims to incapacity benefits. We have included scenarios around this conversion rate assumption and a scenario which looks at a higher proportion of all recipients remaining on benefits for longer than 12 months. Table 20.3 describes the 9 scenarios we have modelled while Table 20.4 shows the results.

Table 20.3: Description of scenarios for incapacity

Scenario	Description
1	Exit rates increase by 10%
2	Exit rates decrease by 10%
3	Transition rates increase by 10%
4	Transition rates decrease by 10%
5	Average sizes increase by 10%
6	Average sizes decrease by 10%
7	Conversion rate from initial liability is 25% higher than expected
8	Conversion rate from initial liability is 25% lower than expected
9	75% of all recipients become long term recipients

Table 20.4: Incapacity liability under modelled scenarios

Scenario	Short term recipients ($m)	Current long term recipients ($m)	Future long term recipients ($m)	Total ($ m)	Change in Liability ($m)	% Change
Base	960.6	3,051.2	4,881.3	8,893.1		
1	960.6	2,933.5	4,510.1	8,404.2	(488.9)	(5.5%)
2	960.6	3,175.8	5,291.2	9,427.7	534.5	6.0%
3	991.3	3,051.2	5,333.5	9,376.0	482.9	5.4%
4	934.6	3,051.2	4,393.2	8,378.9	(514.2)	(5.8%)
5	1,056.8	3,051.2	5,370.3	9,478.3	585.1	6.6%
6	864.6	3,051.2	4,393.9	8,309.7	(583.4)	(6.6%)
7	1,187.9	3,051.2	5,868.6	10,107.7	1,214.6	13.7%
8	733.3	3,051.2	3,894.0	7,678.5	(1,214.6)	(13.7%)
9	1,131.2	3,051.2	5,736.3	9,918.7	1,025.6	11.5%

MRCA Medical Scenarios

Table 20.5: MRCA Medical liability sensitivity analysis

Sensitivity	Description	MRCA Medical Liability ($ m)	Change in Liability ($m)	% Change
Base	-	13,627		
1	Utilisation rates (white card) increase by 10%	13,945	318	2.3%
2	Utilisation rates (white card) decrease by 10%	13,305	(322)	(2.4%)
3	Average size increases by 10%	14,990	1,363	10.0%
4	Average size decreases by 10%	12,264	(1,363)	(10.0%)
5	Claimant projection increases by 10%	14,188	561	4.1%
6	Claimant projection decreases by 10%	13,094	(534)	(3.9%)
7	Gold Card transition probabilities increase by 10%	14,170	543	4.0%
8	Gold Card transition probabilities decrease by 10%	13,099	(528)	(3.9%)

Table 20.6: MRCA Medical liability under modelled scenarios

Scenario	Description	MRCA Medical Liability ($ m)	Change in Liability ($m)	% Change
Base	-	13,627		
1	All cashflows arising from claimants with at least one injury before the valuation date are fully accrued	16,741	3,113	22.8%
2	Defence Superannuation invalidity mortality	12,392	(1,235)	(9.1%)
3	No backlog adjustment for recent accident years	12,935	(693)	(5.1%)
4	2022 average size	13,061	(566)	(4.2%)
5	All claimants with 40+ impairment points get a Gold Card eventually (45% ultimate Gold Card proportion for IBNR claimants)	14,698	1,071	7.9%
6	37.5% ultimate Gold Card Proportion	13,257	(370)	(2.7%)

20.2.7 The estimate of the MRCA medical liability was based on assumptions around how the future cashflows can be attributed to incidents arising before and after the valuation date. If we treated all cashflows arising from those known or assumed to have at least one incident before the valuation date as contributing to the accrued liability as in Scenario 1, the MRCA medical liability would increase by $3.1bn to $16.7bn.

20.2.8 The MRCA scheme is still relatively immature. We have used the existing experience to project future usage rates but as medical benefits can last significantly beyond this, there is considerable uncertainty as to whether experience will differ in the long term. Scenarios 2 and 4 look at the impact of different long term average size and mortality outcomes amongst the medical population.

20.2.9 The proportion of medical claimants that will ultimately receive a Gold Card is an area of significant uncertainty. For the current valuation, we have selected an ultimate Gold Card proportion of 40 per cent. This assumption reflects the limited experience to date as well as the number of veterans with impairment points close to that required for Gold Card eligibility but does involve significant judgement. Scenarios 5 and 6 show the impact on alternative ultimate proportions on the liability.

Household Services Scenarios

Table 20.7: DRCA Other 2 liability sensitivity analysis

	Description	DRCA Other 2 Liability ($ m)	Change in Liability ($m)	% Change
Base	-	1,175		
1	Average size is 10% higher	1,293	118	10%
2	Average size is 10% lower	1,058	(118)	(10%)
3	New claimants are 10% higher	1,245	70	6%
4	New claimants are 10% lower	1,109	(66)	(6%)
5	Usage is 10% higher	1,246	71	6%
6	Usage is 10% lower	1,104	(71)	(6%)

Table 20.8: DRCA Other 2 liability under modelled scenarios

Scenario	Description	DRCA Other 2 Liability ($ m)	Change in Liability ($m)	% Change
Base	-	1,175		
1	Utilisation rate flattens at a higher long term rate of 67%	1,260	84	7%
2	Utilisation rate further reduces to a long term rate of 50%	1,053	(123)	(10%)
3	Conversion rate from initial liability is chosen as the 2-year average	1,258	83	7%
4	Defence Superannuation invalidity mortality is used	1,024	(151)	(13%)
5	Conversion rate from initial liability is 25% higher than expected	1,203	28	2%
6	Conversion rate from initial liability is 25% lower than expected	1,146	(29)	(2%)

Table 20.9: MRCA Other 2 liability sensitivity and scenario analysis

Sensitivity	Description	MRCA Other 2 Liability ($ m)	Change in Liability ($m)	% Change
Base	-	2,788		
1	Average size is 10% higher	3,050	262	9%
2	Average size is 10% lower	2,526	(262)	(9%)
3	New claimants are 10% higher	2,966	178	6%
4	New claimants are 10% lower	2,615	(173)	(6%)
5	Usage is 10% higher	2,982	194	7%
6	Usage is 10% lower	2,594	(194)	(7%)

Table 20.10: MRCA Other 2 liability under modelled scenarios

Scenario	Description	MRCA Other 2 Liability ($ m)	Change in Liability ($m)	% Change
Base	-	2,788		
1	Utilisation rate flattens at a higher long term rate of 67%	2,970	183	7%
2	Utilisation rate further reduces to a long term rate of 50%	2,437	(351)	(13%)
3	Conversion rate from initial liability is chosen as the 2-year average	2,925	137	5%
4	Defence Superannuation invalidity mortality is used	2,570	(218)	(8%)
5	Conversion rate from initial liability is 25% higher than expected	2,882	94	3%
6	Conversion rate from initial liability is 25% lower than expected	2,691	(96)	(3%)

20.2.10 The future utilisation rate for household services is an area of uncertainty as there has been several policy changes with an impact on benefit usage. There remains significant uncertainty as to how future usage experience will emerge in the long term. For the current valuation, we have selected a long term rate of 60 per cent for DRCA and 59 per cent for MRCA. Scenarios 1 and 2 show the impact of alternative long term utilisation rates and usage patterns on the liability of Other 2.

20.2.11 Conversion rate from initial liability to new household services claimants impacts the number of new claimants in the future as a result of the backlog. Scenario 3 show the impact on Other 2 liability if the 2-year average conversion rate were used as the assumption in the valuation.

20.3 MRCA exposure scenarios

20.3.1 To demonstrate the extent of the uncertainty inherent in the MCS liability valuation, we have estimated the quantum of the MRCA liability under various claimant scenarios. We have specifically focused on incapacity, permanent impairment, medical and household services this year as these heads of damage comprise over 96 per cent of the MRCA liability. A similar approach is not possible for the DRCA liability due to the paucity of data on the DRCA veteran population.

20.3.2 The liability under each claim scenario for a head of damage is calculated as the sum of the liability arising from the following 3 claimant groups: existing MRCA claimants that have received benefits under the head of damage to date, MRCA veterans that have not received a payment under the head of damage to date and the current ADF. To have entitlements under MRCA, veterans are required to have service after 30 June 2004 and, therefore, the total MRCA veteran population can be estimated using defence historical personnel data. To estimate the current defence force exposure, we have included 15 per cent of reservists in addition to the permanent ADF as at 30 June 2022 to be consistent with the exposure used for the valuation.

20.3.3 For those that have separated from defence, any future cashflows can be considered fully accrued. However, a proportion of future cashflows arising from current ADF personnel will relate to accidents that will occur in the future. As such, it is necessary to calculate the proportion of this liability that is accrued as at the valuation date. By considering the service years rendered to date and remaining service years for the current ADF population based on historical separation rates from defence, we estimate the accrued proportion of the liability arising from the current ADF to be 56 per cent.

20.3.4 For incapacity and permanent impairment respectively, the liability is modelled by projecting benefit episodes and benefit payments rather than by projecting claimants. Therefore, an assumption around the ultimate episodes per claimant and claims per claimant is required. Due to the high level of uncertainty around the ultimate incapacity episodes per claimant and permanent impairment claims per claimant, we treat this assumption as a parameter in the scenario analysis and consider a range of possible values based on the experience of both MRCA and DRCA cohorts.

20.3.5 To receive an incapacity payment, the claimant must be under the Age Pension age. Therefore, it is necessary to restrict the number of MRCA veterans that have not received an incapacity payment to date to only those under the Age Pension age. Based on DVA client age profiles data from MRCA claimants, we have assumed 98% of the MRCA veteran population are under the Age Pension age.

20.3.6 We calculate the liability under each claim scenario using the following methodology:

Scenario liability = *Claimants to date* liability + *Veterans not on benefit IBNR* liability + *ADF IBNR liability,* where

Veterans not on benefit IBNR liability = (number of veterans x scenario % – number of claimants to date) x liability per IBNR claimant (lifetime cost), and

ADF IBNR liability = number *of current defence personnel x scenario % x liability per IBNR claimant (lifetime cost) x proportion accrued*

20.3.7 The lifetime cost for each head of damage is calculated by dividing the IBNR component from the liability valuation by the projected number of IBNR claimants. As the lifetime cost is based on the valuation IBNR liability component, it reflects all the current valuation assumptions and incorporates timing of payments and discounting consistent with the valuation IBNR component.

Table 20.11: MRCA liability under claimant scenarios

Scenario	Assumptions	Medical ($ b)	PI ($ b)	Incapacity ($ b)	Other 2 ($ b)	MRCA Total $ b (% change)
Base	Valuation assumptions	13.6	10.6	7.3	2.3	35.2
1	Medical and PI claimants: 35% Incapacity claimants: 20% Household Services claimants: 15% PI claims per claimant: 1.7 Incapacity episodes per claimant: 1.8	12.2	4.5	6.9	2.0	26.9(-23%)
2	Medical and PI claimants: 35% Incapacity claimants: 20% Household Services claimants: 15% PI claims per claimant: 2 Incapacity episodes per claimant: 2	12.2	6.4	7.9	2.0	29.8(-15%)
3	Medical and PI claimants: 55% Incapacity claimants: 30% Household Services claimants: 20% PI claims per claimant: 1.7 Incapacity episodes per claimant: 1.8	18.8	10.6	11.4	2.6	44.8(27%)
4	Medical and PI claimants: 55% Incapacity claimants: 30% Household Services claimants: 20% PI claims per claimant: 2 Incapacity episodes per claimant: 2	18.8	13.6	12.8	2.6	49.2(40%)
5	Medical and PI claimants: 75% Incapacity claimants: 40% Household Services claimants: 25% PI claims per claimant: 1.7 Incapacity episodes per claimant: 1.8	25.5	16.7	15.8	3.3	62.6(78%)
6	Medical and PI claimants: 75% Incapacity claimants: 40% Household Services claimants: 25% PI claims per claimant: 2 Incapacity episodes per claimant: 2	25.5	20.7	17.8	3.3	68.6(95%)

21 Compliance with Professional Actuarial Standards

21.1.1 The Actuaries Institute issues Professional Standards to provide guidance to actuaries in carrying out their professional role. Professional Standard 302 (PS302) deals with actuarial reports and advice on general insurance technical liabilities. Section 1.1.2 of PS302 defines general insurance claims to include liabilities imposed by legislation and section 1.1.3 sets out situations under which PS302 applies. These include a valuation conducted to prepare financial statements under accounting standards. In this case, the valuation report supports the preparation of financial statements under Accounting Standard AASB137. A separate letter on the methodology used in estimating the provision as at 30 June 2023 for financial statement purposes will be provided to DVA in July of 2023. This report, in conjunction with the financial statements letter provided to DVA in July, has been produced to comply with the requirements of PS302.

21.1.2 Some aspects of PS302 are outside the scope of this report. These include risk margins, claim handling expenses, and reinsurance recoveries associated with the estimates. As discussed in section 5.6, AASB137 does not explicitly require a risk margin to be included. In the context of the Commonwealth's balance sheet, the requirements set out in AASB137 would argue against the inclusion of a risk margin since it would be irrational for the Commonwealth to pay more than the central estimate to settle the liability. This view is consistent with the fact that the Commonwealth chooses to self-insure many of its risks rather than pay a premium to transfer them off the balance sheet. Section 5.5 discusses claims handling expenses and section 5.7 discusses the provision for any expected recoveries.

21.1.3 The valuation and this report have been subject to internal technical and peer review. The technical review focuses on the data, calculations, and results whilst the peer review focuses on the approach, assumptions and judgements, and results.

Jane Miao, FIAA
Actuary

27 June 2022