FALLING THROUGH THE CRACKS

Report for the Financial Services Council by Cadence Economics

MAY 2018



B



CONTENTS

FOREWORDS	4
KEY POINTS	6
EXECUTIVE SUMMARY	7
01 INTRODUCTION	10
02 BACKGROUND	11
The costs of injury and illness	12
The nature of injury and illness	13
Increasing costs related to time out of the workforce	16
Mental illness	17
The importance of returning to work	18
Evidence from the sector	19
03 THE ESTIMATED BENEFITS OF REFORM	20
Modelling framework	21
REFERENCES	24

FOREWORDS



SALLY LOANE CEO, Financial Services Council

FINANCIAL SERVICES COUNCIL

Last year, life insurance companies paid more than \$9.5 billion to support Australians and their families in their time of need, money that goes directly to people when they need it most.

But there is much more to life insurance – it can help Australians protect their families and preserve their way of life in the event of an accident, serious illness or even death. We don't like thinking about these possibilities, but having contingency plans in place can give us peace of mind.

Life insurers are investing significantly in their teams to deliver world class support to people going through difficult times. Claims teams are now comprised of 15-45% of allied health professionals, who bring a wealth of experience to better help Australians return to wellness.

Life insurers are also encouraging people to take an interest in their health through apps that reward them for leading healthier lifestyles.

There is more the life insurance sector would like to do – most particularly, help Australians return to work via early intervention – but unfortunately there are still a number of legislative restrictions that prevent this from happening.

The FSC has long advocated for removal of these barriers so more Australians can return to wellness sooner, giving them the opportunity to continue to contribute to theirs and their families' future. We know that work can play an important role in a person's recovery. The longer someone is off work, the less likely they are to return – in fact research has shown that if a person is off work for 70 days, their likelihood of returning to work reduces to 35 per cent.

The Financial Services Council, with its members BT Financial Group and MetLife, commissioned Cadence Economics to quantify the economic benefit of removing the legislative barriers so that life insurers can better support people who want to get back to wellness and work.

Our research clearly shows that enabling life insurers to intervene earlier to fund medical treatment has the potential to increase a person's quality of life and it will also improve their chance of returning to wellness. In some cases, it may even reduce the likelihood of someone becoming permanently disabled.

Earlier interventions can mean people return to work five weeks earlier than would otherwise be the case without intervention. It will also deliver significant short, medium and long terms benefits to the national economy.

This research demonstrates that the changes proposed by the Financial Services Council – a simple reform to existing legislation – will deliver better outcomes for all Australians. We urge the Government to enact the changes as soon as possible.



SUE HOUGHTON General Manager Insurance, BT Financial Group

BT FINANCIAL GROUP

BT's approach to Life Insurance is built on an understanding that it must provide certainty and comfort for insured Australians so they are protected in life's most challenging moments.

There is a significant economic and mental health risk for Australians who cannot get the right level of medical help when they need it. Research shows that the longer someone is off work, the less likely they will ever work again, and tragically, the longer a young man is off work, the higher the risk of him taking his own life. Obviously this is something we simply must work to address.

Currently, life insurers are constrained in their ability to provide timely medical support to Australians which has implications for individual wellbeing, the Government supported social safety net, and how insurance companies interact with their customers. At BT we want every opportunity to help Australians quickly recover from accidents and injuries to live the most rewarding life possible.

BT is pleased to co-sponsor this important report into the benefits early intervention can have for Australians. We believe there is an immediate opportunity to work with Parliament to ensure regulation enables life insurers to fund medical treatments, thus improving the health outcomes for more Australians.



VINCE WATT Interim CEO, MetLife Australia

METLIFE AUSTRALIA

Since 2005 MetLife has supported Australians when they need it most. Over this time we've seen dramatic changes in society and shifts in attitudes to health.

In order to continue providing the right level of care for customers, we believe a new approach is needed to enable targeted early intervention practices by life insurers to aid health recovery.

Australia has a strong system of injury management however there are still instances where people aren't able to receive the critical support needed to help them return to health. Targeted reforms would enable life insurers to supplement existing services and provide assistance in such situations. In addition, the prevalence of mental health conditions is increasing and secondary psychological issues arising from illness or injury are common. Treatment can be difficult to obtain and is often expensive. Life insurers are uniquely placed to help identify early warning signs and could make a meaningful difference by funding certain treatments.

The findings in this research support the question - are we doing the best we can to help people get back to health? MetLife believes there is more we can and should do, and is ready to work with others to rise to this challenge.

KEY POINTS

This report estimates the economy-wide benefits of reforms that allow targeted early intervention by life insurers to certain customers.

• Early intervention results in faster return to work times, estimated to improve by five weeks, from 18 weeks to 13 weeks, and the prevention of 8 per cent of people with injuries from transitioning to total permanent disability.

The economic modelling undertaken is based on scenarios of economic conditions with and without early intervention provided by insurers. Under the scenario where early intervention is allowed, there are two main impacts on the overall economy.

- First, there is an effective increase in labour supply as those on income protection (IP) return to work faster, and a number of people do not go on to permanent disability insurance (TPD).
- Second, there is an improvement in the government budget position resulting from the direct spending on health services for those affected persons.

Two scenarios have been considered in relation to the potential number of people who might benefit from early intervention:

- In our core scenario, a calculated pool of those who would benefit from early intervention of 1,379 persons out of the estimated total of 10.1 million TPD and IP policy holders in Australia.
- In our high side scenario, a calculated pool of 3,600 persons out of the total pool, based on industry estimates of new claims each year.

Under the core scenario, the reduced cost to government is estimated to increase over time as the benefits cumulate over a greater number of people. By 2040 it is estimated that total government expenditure will be \$252.3 million lower in real terms (2017-18 dollars).affected persons.

Over the period 2019 to 2040, the government is estimated to save \$1.12 billion in net present value terms as a result of reduced spending on health.

In absolute terms, by 2040 the projected increase in real GDP impact is estimated to be \$405.7 million, representing approximately \$169,000 in real GDP per additional full time equivalent worker in the labour force. Taking the projected benefits of reform over this period, Australian real gross domestic product (GDP) is projected to increase by \$1.56 billion in net present value (NPV) terms. The high side scenario with a benefit pool of 3,600 persons has correspondingly higher impacts. Under this scenario, the net present value of the policy change is an **increase in Australian GDP of \$4.06 billion**, and \$3.68 billion in gross national income (GNI) terms.

EXECUTIVE SUMMARY

Many Australians insure themselves against economic losses associated with mental and physical disability either directly or through group insurance in superannuation. This insurance comes in a variety of forms, such as total and permanent disability insurance (TPD) or income protection (IP) which is insurance for temporary incapacity.

TPD and IP are important income support mechanisms.

Each year, many Australians who are unable to work due to ill health, injury or disability receive income support in one form or another. According to Collie *et al.* (2017), the total amount income support payments to those unable to work is estimated to be \$37.2 billion in 2015-16. Around half of this income support is for short-term injury or illness and is provided by employers through sick leave which was accessed by around 6.5 million people in 2015-16. The other half of income is for those with more significant injuries or illness and is offered through a variety of mechanisms provided by Commonwealth or State and Territory governments as well as other private sources (primarily life insurance). An estimated 786,000 people accessed this form of income support in 2015-16.

Collie *et al.* (2017) estimated that life insurance through either TPD or IP was accessed by 95,000 people in 2015-16, with a total payout in that year of \$4.4 billion. In 2016-17, the estimated TPD and IP payout is \$5.1 billion.

In 2015-16, total IP and TPD claims constituted around 12 per cent of all income support provided in that year. When sick leave is excluded, these payments constitute 24 per cent of income support.

These figures highlight the underlying importance of TPD and IP in Australia's current income support system.

The costs of injury and illness are large...

According to Collie *et al.* (2017), 156,000 people accessed workers' compensation, costing around \$2.5 billion in 2015-16.

Analysis undertaken by Safe Work Australia shows that in 2012-13, the estimated cost of work-related incidents was \$61.8 billion. This figure had grown from \$34.3 billion in 2000-01, or 80 per cent in nominal terms. Their analysis shows that both despite the number of serious claims¹ made in Australia declining the median time lost and compensation payments made have both increased by over 30 per cent over the period 2000-01 to 2012-13. While the bulk of workplace injuries relate to musculoskeletal disorders, there has been significant growth in mental illness claims. Claims for mental illness are particularly costly, with relatively high median compensation payments and, by far, the longest median time spent off work (16 weeks) compared with other injuries or illness.

Importantly, this analysis shows that only 25 per cent of the total cost of work–related injury and disease was due to the direct costs of work-related incidents (income support). The remaining 75 per cent was accounted for by indirect costs such as lost productivity, loss of income and quality of life.

¹ Serious claims are defined as those where a claimant is off work for more than five days.

EXECUTIVE SUMMARY

... and they increase substantially the longer the time off work

The data clearly shows the significant increase in costs the longer a worker is out of the workforce as a result of injury or illness. The burden of these costs increases dramatically for both the worker and the community.

There is a clear negative link between the probability of returning to work based on the amount of time a person is off work. According to analysis undertaken by the Australian Faculty of Occupational and Environmental Medicine (2011), if a person is off work for:

- 20 days, the chance of ever returning to work is 70 per cent;
- 45 days, the chance of ever returning to work is 50 per cent;
- 70 days, the chance of ever returning to work is 35 per cent.

Apart from the overall economic cost discussed above, the Australian Faculty of Occupational and Environmental Medicine (2011) noted that:

The case for increased action becomes even more compelling when the negative health consequences of remaining away from, or out of, work are considered.

Research shows that long-term work absence, work disability and unemployment are harmful to physical and mental health and wellbeing.

Moreover, the negative impacts of remaining away from work do not only affect the absent worker; families, including the children of parents out of work, suffer consequences including poorer physical and mental health, decreased educational opportunities and reduced long term employment prospects. Related to this, of particular concern in relation to workforce injuries is the rise in prevalence and cost of mental illness. This is not only because of the relatively lengthy timeframes involved to return to wellness, but there is strong evidence of comorbidity in relation to mental health and workplace injuries.

It is common for those out of the workforce with musculoskeletal injury to exhibit depressive symptoms in the first year following that injury. Following an injury of this type, the first six months are an important time in considering the symptoms of depression.

There is evidence that early intervention is critical in return to work outcomes

Collie *et al.* (2015) undertook a comprehensive assessment of data in relation to compensation policies and return to work effectiveness based on the Australian workers' compensation system.

This study produced a set of recovery curves, showing at the national level, for those who have at least two weeks off work, 78.4 per cent are still off work at four weeks. At three months, this figure falls to 40.7 per cent. The figures are then 25.5, 15.5 and 8.1 per cent respectively at six months, one year and two years. Importantly, the figures show considerable differences across jurisdictions. For example, injured Victorian workers who were off work for at least two weeks, had 88 per cent greater odds of receiving income replacement at four weeks compared to injured NSW workers. In discussions with industry experts, a key reason identified for relatively worse return to work effects in Victoria was the relatively large waiting times to report workers' compensation incidents in that State relative to other jurisdictions.

Swiss Re (2016) conducted a survey of ten insurance companies for claims received and managed over 2015-16 and for 2014 with a focus on the role of rehabilitation services in assisting customers return to health and work. Some of the key findings of that report are that:

- Over the two survey periods, in-house rehabilitation teams have grown by 173 per cent and that claims assessors had become increasingly involved in assisting customers access support and assistance to return to health and work.
- Customer participation in in-house rehabilitation services increased from an average of 6.1 per cent per participating insurer in 2014 to 31.3 per cent in 2016. The participation by customers in external rehabilitation services rose over this period from 5.8 per cent to 17.9 per cent.
- There had been significant improvements in the timeliness of offering and receiving rehabilitation services. For example, the time from claim notification to referral to an external rehabilitation provider reduced by 119 days on average.
- Return to work rates had improved from 54.4 per cent in 2014 to 58.6 per cent in 2016 (which compares with a return to work rate of those in the workers' compensation system which was unchanged over that period).

The regulatory environment in which these policies operate is complex, and there is a growing realisation that certain constraints in the current system are potentially leading to sub-optimal outcomes.

Recognising this, on 27 March 2018 the House of Representatives referred an inquiry to the Parliamentary Joint Committee on Corporations and Financial Services to consider options for greater involvement by private sector life insurers in worker rehabilitation. The Financial Services Council (FSC) has argued that reforms to the system that allow life insurers to provide early intervention to support customers would result in an increased return to wellness, including an increased potential for individuals to return to work.

Estimated benefits of reform

Data in relation to how those receiving TPD and IP might be affected by early intervention is not readily available as a result of the current restrictions meaning there are only limited data points that quantify the improved return to work outcomes for persons as a result of early and targeted wellness interventions.

Based on the information gathered, and through a targeted consultation process, the estimated benefits of the reform presented in this paper are based on the following scenarios:

- In our core scenario, a calculated pool of persons for whom the current restrictions are binding of 10,118 out of the estimated total of 10.1 million TPD and IP policy holders in Australia. Of the total 10,118 persons there are an estimated 1,379 for whom early intervention would be beneficial and cost effective.
- In our high side scenario, a calculated pool of 3,600 persons out of the total pool, based on industry estimates of new claims each year.
- An estimated reduction in return to work times of five weeks, down from 18 weeks to 13 weeks, and preventing 8 per cent of injuries from transitioning to total permanent disability.

The economic modelling undertaken is based on scenarios of economic conditions with and without early intervention provided by insurers. Under the scenario where early intervention is allowed, there are two main impacts on the overall economy. First, there is an effective increase in labour supply as those on IP return to work faster, and a number of people do not go on to TPD. Based on the analysis undertaken, this increases the effective workforce by 110 full time equivalent (FTE) employees in 2019, 120 FTE in 2020 stabilising at 109 FTE after that. Second, there is an improvement in the government budget position resulting from the direct spending on health services for those affected persons. The reduced cost to government is estimated to be \$18.9 million in the first year but increases over time as the benefits cumulate over an increasing number of people. By 2040 it is estimated that total government expenditure will be \$252.3 million lower in real terms (2017-18 dollars).

Taking the projected benefits of reform over the period 2019 to 2040, Australian real gross domestic product (GDP) is projected to increase by **\$1.56 billion** in net present value (NPV) terms2 in 2017-18 dollars. National welfare, measured by gross national income (GNI) is projected to be \$1.42 billion in NPV terms.

In absolute terms at 2040 the GDP impact is estimated to be \$405.7 million, representing approximately \$169,000 in GDP per additional full time equivalent worker in the labour force.

Over the period, the government is estimated to save \$1.12 billion in net present value terms as a result of reduced spending on health.

The high side scenario with a benefit pool of 3,600 persons has correspondingly higher impacts. Under this scenario, the net present value of the policy change is an **increase in Australian GDP of \$4.06 billion**, and \$3.68 billion in GNI terms. Applying the same sensitivity analysis as for the core scenario, we find that the increased economic activity alone improves the fiscal position by \$529.3 million.

² All net present values calculated using a 7 per cent real discount rate.

01 INTRODUCTION

Many Australians insure themselves against economic losses associated with mental and physical disability either directly or through group insurance in superannuation. This insurance comes in a variety of forms, such as total and permanent disability insurance (TPD) or income protection (IP) which is insurance for temporary incapacity. Apart from providing income support, these policies often provide a range of ancillary services such as covering the costs of: nursing care, rehabilitation expenses and rehabilitation benefits to assist the insured return to work (as well as workplace modification expenses).

The regulatory environment in which these policies operate is complex, and there is a growing realisation that certain constraints in the current system are potentially leading to sub-optimal outcomes. Recognising this, on 27 March 2018 the House of Representatives referred an inquiry to the Parliamentary Joint Committee on Corporations and Financial Services to consider options for greater involvement by private sector life insurers in worker rehabilitation. The Financial Services Council (FSC) has argued that reforms to the system that allow life insurers to provide early intervention to support customers would result in an increased return to wellness, including an increased potential for individuals to return to work.

Against this background, the FSC commissioned Cadence Economics to undertake economic modelling that might result from reform. This analysis has been undertaken through the construction of a model that considers the impacts of reform on individuals wellness, the insurance sector, government expenditure and the wider Australian economy. The underlying data and assumptions are detailed in Section 2, with the results of the analysis presented in Section 3.

02 BACKGROUND

Each year, many Australians are unable to work due to ill health, injury or disability. For these people, there are a variety of income support mechanisms operating across the Australian economy. The most common income support mechanisms are summarised in Table 1, which is taken from a comprehensive review of Australia's income support system for people with health related work incapacity undertaken by Collie *et al* (2017).

A total of \$37.2 billion in income support was paid in 2015-16. Of this, the analysis shows that the main source of income protection is employer provided sick leave. Around 6.5 million people were estimated to access sick leave in 2015-16, at a cost of \$18.7 billion. Sick leave is, of course, an income support mechanism for short term conditions. Collie *et al* (2017) estimated that 786,000 people were on income support provided by either the Commonwealth or State and Territory governments as well as other private sources (primarily life insurance). The combined contribution of this income support was \$18.5 billion in 2015-16 with the main contribution from social security (disability support pension) followed by life insurance through either TPD or IP.

DETAILED BREAK-DOWN OF THE TYPES OF INCOME SUPPORT IN AUSTRALIA IN 2015-16

Type of income support	Recipients ('000)	Expenditure (\$m)
Employer provided Entitlements (sick leave)	6,544	18,725
Workers' compensation (short tail)	126	1,859
Workers' compensation (long tail)	30	650
MVA compensation (statutory benefits)	6	96
MVA compensation (lump sum)	9	267
Life insurance (income protection)	65	1,444
Life insurance (TPD)	30	2,990
Social security (disability support pension)	282	6,108
Social security (Newstart allowance)	169	2,287
Social security (Youth allowance)	10	102
Social security (Sickness allowance)	8	108
DVA compensation and pensions	24	293
Superannuation withdrawals	27	2,226
TOTAL	7,330	37,155

SOURCE: Collie et al (2017)

Life insurance through either TPD or IP is shown to cover 95,000 income support recipients, with a total payout in 2015-16 of \$4.4 billion. Of this, as shown in Table 1, just over \$1.4 billion was paid in IP to 65,000 people in 2015-16 (each recipient receiving around \$22,000 on average). The remaining \$3 billion was paid in TPD claims to 30,000 recipients (each receiving around \$100,000 on average).

The \$4.4 billion in total IP and TPD claims constituted around 12 per cent of all income support provided in that year. In terms of the number of people affected, the 95,000 people receiving income support through TPD and IP represent only 1 per cent of the estimated population receiving income support.

When sick leave is excluded, this figure rises to 12 per cent. When sick leave is excluded, the \$4.4 billion in total IP and TPD claim payments made to just 1% of those receiving compensation, constitute 24 per cent of income support.

THE COSTS OF INJURY AND ILLNESS

Safe Work Australia (2015) undertook a comprehensive assessment of the economic costs associated with workrelated injury and illness. These costs were based on the number of people entering the compensation (or medical) systems during a particular year as a result of work-related incident or illness and the costs (both current and expected future costs) associated with those cases. In aggregate the latest estimate was that for the year 2012-13, the estimated cost of work-related incidents was \$61.8 billion as summarised in Figure 1. The cost estimates produced by Safe Work Australia (2015) built on work undertaken by the Industry Commission (1995), that estimated that only 25 per cent of the total cost of work– related injury and disease was due to the direct costs of workrelated incidents. The remaining 75 per cent was accounted for by indirect costs such as lost productivity, loss of income and quality of life.

FIGURE 01

ESTIMATED COSTS OF WORKPLACE INJURIES (\$ BILLION)



Berecki-Gisolf *et al* (2012) showed that incidence of lost time claims increases with age, as does the time to return and likelihood of recurrence. As Australia's population is aging, this trend is likely to continue.

THE NATURE OF INJURY AND ILLNESS

While there is no publicly available information in relation to the nature and extent of injuries resulting in either TPD or IP claims, the latest comparative performance monitoring report published by Safe Work Australia (2017) based on workers' compensation statistics is a useful reference in relation to injuries and illnesses that prevent Australians from working. This report tracks information on serious claims, which are defined as compensation claims for incapacity that results in a total absence from work of one working week or more. Claims in receipt of common-law payments are also included, but fatalities and claims arising from a journey to or from work or during a recess period are not.

The data reported in Safe Work Australia (2017) shows that injuries and musculoskeletal disorders account for the majority of serious claims made through the workers' compensation system. The incidence rate for serious claims is 9.3 per 1,000 workers, of which 8.4 claims made are for injuries and musculoskeletal disorders. Related to this, workers that are required to perform higher levels of physical activity are more likely to make a serious claim.

In terms of age, workers in the 45 to 65 age bracket are more likely to experience injury or disease. The 55-59 age bracket has the highest incidence of serious claims with 12.5 per 1,000 workers, although there are numerous claimants for those under 30 (as shown in Table 2).

RATES OF SERIOUS CLAIMS BY INDUSTRY AND DISEASE, BY AGE COHORT, 2015-16

Type of income support	Injury	Disease	All claims
<20 years	5.1	0.1	5.3
20-24 years	7.5	0.4	7.9
25-29 years	7.2	0.6	7.7
30-34 years	7.0	0.7	7.7
35-39 years	7.6	1.0	8.6
40-44 years	8.7	1.2	9.9
45-49 years	9.5	1.4	11.0
50-54 years	10.6	1.5	12.1
55-59 years	11.0	1.6	12.5
60-64 years	10.7	1.3	12.0
65 years+	7.0	0.6	7.6
TOTAL	8.4	1.0	9.3
		SOURCE: Safe W	/ork Australia (2017)

While the number of serious claims made in Australia has declined since 2000-01, from just over 16 claims per 1,000 workers, the data shows that the time lost and compensation paid to serious claimants have both increased.

As shown in Figure 2, in 2000-01 the median time lost per claim was 4.2 weeks in 2014-15 the time lost had increase to 5.6 weeks, an increase of 33.3 per cent. Over the same period, the median compensation payment had increased in real terms from \$8,412 to \$11,000 (constant 2014-15, Wage Price Index dollars³), an increase of 30.8 per cent.

³ Discounted by the wage price index to maintain consistency with the Work Safe Australia (2017) report.

FIGURE 02

COMPENSATION AND TIME LOST TO SERIOUS CLAIMS 2001-01 TO 2014-15



SOURCE: Safe Work Australia (2017), Cadence Economics estimates



Median time lost (weeks) (RHS)

In relation to workplace injuries and musculoskeletal disorders, Table 4 shows that in total the median compensation payment made in 2014-15 was \$10,100 and that the median time lost for these injuries was 5.1 weeks. Over the period 2000-01 to 2014-15, the median compensation paid rose 33 per cent and the time off 28 per cent. The largest median payouts were for injuries to nerves and the spinal cord, which have decline in terms of median compensation paid and time lost substantially since 2000-01.

That said, for the bulk of the injuries shown in Table 3, the median compensation payments and time lost have risen, particularly for other injuries and intercranial injuries.

TABLE 03

KEY STATISTICS IN RELATION TO WORKFORCE INJURIES 2000-01 TO 2014-15

Type of injury	Median compensation (dollars)	Per cent change (200-01 to 2014- 15)^	Median time lost (weeks)	Per cent change (200-01 to 2014-15)
Traumatic joint/ligament and muscle/tendon injury	\$9,900	15	5.0	22
Wounds, lacerations, amputations and internal organ damage	\$6,600	51	2.8	17
Musculoskeletal and connective tissue diseases	\$15,600	-14	9.2	10
Fractures	\$14,100	36	7.9	16
Other injuries	\$8,300	71	4.0	67
Burn	\$2,600	15	2.0	0
Intracranial injuries	\$7,300	46	3.6	38
Injury to nerves and spinal cord	\$26,100	-73	12.6	-52
Other claims	\$6,000	-21	4.0	5
TOTAL INJURY AND MUSCULOSKELETAL DISORDERS	\$10,100	33	5.1	28

SOURCE: Safe Work Australia (2017) ^ Percentage change in real 2014-15 dollars.

In relation to diseases, Table 4 shows that in total the median compensation payment made in 2014-15 was \$17,400 and that the median time lost for these injuries was 9.2 weeks. Over the period 2000-01 to 2014-15, the median compensation paid rose 31 per cent and the time off 35 per cent.

A key issue in relation to disease is that of mental illness. This disease results in the largest median compensation payment at \$28,400 and, by far, the longest median time spent off work at 16 weeks.

KEY STATISTICS IN RELATION TO WORKFORCE INJURIES 2000-01 TO 2014-15

Type of injury	Median compensation (dollars)	Per cent change (200-01 to 2014- 15)^	Median time lost (weeks)	Per cent change (200-01 to 2014-15)
Mental disorders	\$28,400	23	16.0	43
Digestive system diseases	\$13,100	19	5.8	0
Nervous system and sense organ diseases	\$16,600	18	8.6	6
Skin and subcutaneous tissue diseases	\$4,600	24	2.8	22
Infectious and parasitic diseases	\$4,100	69	2.2	10
Respiratory system diseases	\$12,400	8	5.0	9
Circulatory system diseases	\$11,700	-53	6.0	-60
Neoplasms (cancer)	\$12,400	-12	2.6	-52
Other diseases	\$8,000	-18	3.8	-33
TOTAL DISEASES	\$17,400	31	9.2	35

SOURCE: Safe Work Australia (2017)

INCREASING COSTS RELATED TO TIME OUT OF THE WORKFORCE

Safe Work Australia (2015) undertook an assessment of the costs to employers, workers and the community of those out of the workforce due to injury and illness over various time periods (Table 5). The time periods were broken into short and long absences as well as partial and full incapacity. The time out of the workforce ranged from 0.2 weeks to 48.4 weeks.

A short absence is defined as being less than five days off work, whereas a long absence implies beingoff work for more than five days with a return to work on full duties. Partial incapacity is defined as being off work for more than five days with a return to work on reduced duties or lower income. Full incapacity is defined as being off work for more than five days with no return to work.

A range of costs were considered including:

- Costs to employers included costs of overtime to cover employee absences, excess payments, staff turnover costs, staff training and retraining costs, medical threshold payments, legal fines and penalties and investigation costs.
- Cost to workers included loss of income, loss of future earnings, medical and rehabilitation costs, travel expenses for treatment, legal costs, carer costs and the cost of aids and modifications.
- Community costs included lost taxation revenue related to loss of income, social welfare payments, health and medical costs (Medicare costs not borne by the worker), rehabilitation costs, inspection and investigation costs, travel concessions (for those with full incapacity) and transfer costs (the deadweight cost of welfare payments and tax losses).

[^] Percentage change in real 2014-15 dollars.

KEY STATISTICS IN RELATION TO WORKFORCE ABSENCE IN 2012-13

Time out of the workforce (weeks per incident)	Short absence	Long absence	Partial incapacity	Full incapacity*
Injury	0.2	6.4	6.4	39.7
Illness	0.2	8.1	38.0	48.4
Cost to employers (\$ per incid	ent)			
Injury	700	8,800	16,400	13,400
Illness	700	11,200	12,100	31,900
Cost to workers (\$ per inciden	t)			
Injury	300	4,500	696,900	2,154,200
Illness	400	4,200	681,800	1,912,000
Cost to community (\$ per inci	dent)			
Injury	3,200	22,800	95,400	1,578,800
Illness	5,200	15,200	44,700	956,000
ALL COSTS (\$ per incident)				
INJURY	4,200	36,200	808,600	3,746,400
ILLNESS	6,300	30,600	738,700	2,899,900

The data presented in Table 5 clearly shows the significant increase in costs the longer a worker is out of the workforce as a result of injury or illness. It also clearly demonstrates the burden of the costs increase dramatically for both the worker and the community. In particular, the costs to workers resulting mainly from foregone income increase under partial and full incapacity.

SOURCE: Safe Work Australia (2015)

MENTAL ILLNESS

Of particular concern in relation to workforce injuries is the rise in prevalence and cost of mental illness. Neil *et al.* (2016) estimated the cost of psychosis to the Australian economy in 2010 at \$5.7 billion which increased to \$6.1 billion in 2014. The 2010 figures are summarised in Table 6 which shows the entire societal cost as well as the government component of these costs. The analysis shows that of the \$5.7 billion total societal costs, \$3.9 billion, or 68 per cent, of this was borne by the government. Time loss costs, either foregone income or tax receipts, comprise the largest component of these costs totalling \$3.1 billion (around 54 per cent). Health sector costs comprise around 26 per cent of these costs, with the bulk of these attributable to government.

^a refers to the time affecting the employer.

ESTIMATED COST TO THE AUSTRALIAN ECONOMY OF PSYCHOTIC DISORDERS IN 2010 (\$ BILLION)

Incidence	Health sector	Other sectors	Time loss costs	TOTAL
Societal	1.5	1.1	3.1	5.7
Government	1.4	0.8	1.7	3.9
			SOUR	CE: Neil <i>et al.</i> (2016)

There is also a growing appreciation of comorbidity in relation to mental health and workplace injuries. In a US study, Kym (2013) found that workers with occupational injury were more likely to become depressed than those with non-occupational injury. A Canadian study undertaken by Carnide *et al.* (2015) assessed the prevalence of depressive symptoms and their relationship with return to work outcomes following a 12 month period following a workplace musculoskeletal injury. The study found that it was common for participants in the study to exhibit depressive symptoms in the first year following a lost-time musculoskeletal injury and problematic return to work outcomes 12 months post-injury. The study concluded that the first six months were important in considering the symptoms of depression.

THE IMPORTANCE OF RETURNING TO WORK

A key factor in determining the overall costs of injury or illness is the amount of time spent out of the workforce. According to the Australian Faculty of Occupational and Environmental Medicine (2011) there is a clear negative link between the probability of returning to work based on the amount of time a person if off work. Australian Faculty of Occupational and Environmental Medicine (2011) showed that if a person is off work for:

- 20 days, the chance of ever returning to work is 70 per cent;
- 45 days, the chance of ever returning to work is 50 per cent;
- 70 days, the chance of ever returning to work is 35 per cent.

Apart from the overall economic cost discussed above, the Australian Faculty of Occupational and Environmental Medicine (2011) noted that:

- The case for increased action becomes even more compelling when the negative health consequences of remaining away from, or out of, work are considered.
- Research shows that long-term work absence, work disability and unemployment are harmful to physical and mental health and wellbeing.

Moreover, the negative impacts of remaining away from work do not only affect the absent worker; families, including the children of parents out of work, suffer consequences including poorer physical and mental health, decreased educational opportunities and reduced long term employment prospects.

While there is little detailed information available in the public domain in relation to the return to work experience of those on TPD and IP (with the exception of broad data discussed below), Collie *et al.* (2015) undertook a comprehensive assessment of data in relation to compensation policies and return to work effectiveness based on the Australian workers' compensation system.

Importantly, the figures showed considerable differences across jurisdictions. For example, injured Victorian workers had 88 per cent greater odds of receiving income replacement at four weeks compared to injured NSW workers. This effect remained at time points from three months to two years post injury with the effect being of a smaller magnitude (32-41 per cent greater odds) but still highly significant.

In discussions with industry experts, a key reason (although though not statistically explored in the Collie *et al.* (2015) paper) identified for relatively worse return to work effects in Victoria was the relatively large waiting times to report workers' compensation incidents in that State relative to other jurisdictions.

FIGURE 03

RECOVERY CURVES REPRESENTING THE DURATION OF CUMULATIVE COMPENSATED TIME LOSS BY JURISDICTION IN 2010



SOURCE: Collie et al. (2015)

EVIDENCE FROM THE SECTOR

Swiss Re (2016) conducted a survey of ten insurance companies for claims received and managed over 2015-16 (a similar survey was conducted for nine participating companies in the calendar year 2013) with a focus on the role of rehabilitation services in assisting customers return to health and work.

While the report urges caution in relation to the analysis, and comparisons over time, some of the key findings of the report were that: • Over the two survey periods, in-house rehabilitation teams have grown by 173 per cent and that claims assessors had become increasingly involved in assisting customers access support and assistance to return to health and work.

• Customer participation in in-house rehabilitation services increased from an average of 6.1 per cent per participating insurer in 2014 to 31.3 per cent in 2016. The increase in participation for customers in external rehabilitation services rose over this period from 5.8 per cent to 17.9 per cent. • There had been significant improvements in the timeliness of offering and receiving rehabilitation services. For example, the time from claim notification to referral to an external rehabilitation provider reduced by 119 days on average.

• Return to work rates had improved from 54.37 per cent in 2014 to 58.62 per cent in 2016 (which compares with a return to work rate of those in the workers' compensation system which was unchanged over that period).

03 THE ESTIMATED BENEFITS OF REFORM

The analysis from the previous section highlighted the importance of life insurance through either TPD or IP in relation to the income support system in Australia. For the 95,000 Australians that received some \$4.4 billion in either IP or TPD claims in 20156-16, this represented around 12 per cent of all income support provided in that year. Those receiving income support through TPD and IP are receiving well above average income support, when sick leave entitlements are excluded, the 1 per cent of compensated injuries covered by TPD and IP represent 12 per cent of the population but receive 24 per cent of the payments.

Rice Warner (2017) estimated that 94 per cent of Australians have some level of life insurance, with the proportion of the working population holding either IP or TPD (or both) to be lower. Around 81 per cent of Australians hold TPD insurance, with an average cover of \$237,000 (three times median household income) and median cover of \$99,500 (around one and a half times median household income). IP cover rates are much lower, with only a third of the working population covered to around 75 per cent of median household income. The regulatory environment in which these policies operate is complex, and there is a growing realisation that certain constraints in the current system are potentially leading to sub-optimal outcomes. Given the importance of TPD and IP as a form of insurance against economic losses associated mental and physical disability there is an increasing realisation that the restrictions applying to insurers from early intervention in the form of rehabilitation services, including the funding of medical treatment and services to support the early return to work is becoming increasingly costly.

THE ESTIMATED BENEFITS OF REFORM

In limited consultation with FSC members, it was established that around 35 per cent of IP and TPD claimants were receiving some form of return to work services or treatment as permitted under the regulations. Of these claimants, it was estimated that 38 per cent would likely benefit from some form of early intervention that was currently precluded by the existing regulations.

Of these claimants that would benefit from intervention, between 60 to 67 per cent of the cases would be mental health related (split evenly between psychiatry/psychology versus programs for cognitive functioning). For musculoskeletal injuries, the most beneficial intervention (covering 88 per cent of claimants) would likely benefit from a course of physical therapy. The analysis and consultation has allowed us to estimate the scope and impact of intervention in two ways. Our core estimate is based on a bottom up approach that takes into account as much of the evidential base as possible, and at each stage where uncertainty in data is present we have made conservative assumptions, and hence is likely to produce a conservative estimate of the impacts. Our alternate framework is based on best estimates from direct consultation to provide a top down estimate of the level of impact, which we use as a high side sensitivity and to test the voracity of our bottom up workings.

MODELLING FRAMEWORK

The core economy wide estimates in this report are derived from a two stage modelling process. In the first step we use the available evidence to build a direct modelling framework that derives both the changes to the labour market as a result of early intervention and the direct cost to government. In the second stage, we undertake economy-wide modelling of the benefits of reform using the Cadence Economics General Equilibrium Model (CEGEM). CGE models, such as CEGEM, are rigorous quantitative models built on strong economic fundamentals and consider the broader welfare effects of the proposed reforms. Since the 1990s, CGE models have been applied to various policy areas, from trade liberalisation to greenhouse gas emission abatement.

Those that might benefit from early intervention

Estimation of the direct impacts starts by determining the pool of persons that might be affected by the proposed reforms. These are assumed to be those covered by life insurance but not covered by private health cover.

Assessment of the number of persons covered by life insurance by broad occupation (heavy blue, light blue, professional, white collar and unknown) is based on industry statistics provided by FSC members and Rice Warner (2017). This data showed a pool of 10.1 million people with either TPD or IP coverage.

To estimate the proportion that are not covered by private health care we use confidentialised tax return data from the ATO, which includes both information on health care coverage and broad occupation. Private health insurance coverage varies from 30.4 per cent for heavy blue workers, to 69.6 per cent for white collar workers. This implied a pool of 4.2 million people. Of these people, based on information provided by insurers, only those who experience injury or disease are assumed to benefit from early intervention. Based on the figures on injury type, and by the duration of injury, produced by Safe Work Australia (2017), and excluding any comorbidity of musculoskeletal injury and mental health, the total pool of those who might benefit from early intervention is 1,379 persons. This estimated pool of 1,379 persons, is a **conservative** estimate as it excludes all people with private health insurance and limits those that might benefit from early intervention to certain musculoskeletal and mental health issues. Based on discussions with life insurers, and using figures provided of between 20,000 and 30,000 new claimants per year, an upper bound estimate of persons who might benefit from early intervention was determined to be 3,600.

Potential return to work benefits

The next consideration is the potential benefits in terms of those people claiming IP returning to work sooner, as well as those not moving into a TPD claim.

However, data in relation to how those receiving TPD and IP might be affected by early intervention is not readily available as a result of the current restrictions meaning there are only limited data points that quantify the improved return to work outcomes for persons as a result of early and targeted wellness interventions.

As such, the starting point for this estimation was the return to work curves produced by Collie *et al.* (2015) discussed above. Of particular note is the return to work rate for Victoria versus the national average, the prescribed injury notification period in Victoria being 30 days after becoming aware of injury, compared to as soon as practicable (or similar) across the remainder of Australia. The Victorian return to work experience is significantly worse than in the remainder of Australia, with consultation suggesting that the comparatively loose reporting timeframes leading to delays in medical attention, and subsequently worse health outcomes.

Using this as a proxy for the potential impacts of the change in return to work outcomes arising from proposed reform, we model a shift in the recovery curve for persons who receive early intervention from the Victorian experience to the national average. To capture the effect of waiting periods for life insurance products we exclude from these curves those persons who return to work in four weeks or less. The remaining data suggests that early intervention may reduce the median off work time from 18 weeks to 13 weeks and prevent eight per cent of injuries from transitioning to total permanent disability.

As a proxy it is important that this approach is sense tested against alternate data sets. Our direct consultation with insurers suggests that the five week reduction may be a conservative estimate, while Swiss Re (2016) suggests an improvement in return to work outcomes of 4.25 percentage points as a result of external rehabilitation provision, with a surveyed data confidence of 3.29 (with 1 listed as educated guess, and 5 listed as full confidence).

For a single year cohort the combination of reduced return to work timeframes and transition to total permanent disability rates yields a relative workforce increase of 110 FTE in year 1, 120 FTE in year 2, and a reduction in transition to total permanent disability of 109 persons. The reduced cost to government of this cohort is estimated to be \$18.9m in the first year, \$7.3m in the second year, and \$11.3m annually for persons who transition to total permanent disability.

The CGE modelling process

To estimate the economy wide impacts of improved labour market outcomes and reduced government expenditure on health costs we have used the CEGEM model, Cadence Economics' inhouse CGE model.

The workforce and cost to government figures derived above are used to build economic shocks for the CEGEM model, and for this exercise we have chosen a modelling period to 2040. In each year from 2019 we introduce another cohort of the intervention pool described above, the impacts of which compound year on year in the case of reduced TPD transitions.

The reduced cost to government is represented in the model through an equivalent economy wide tax cut and an equivalent reduction in government expenditure.

There are a range of mechanisms that may be used to represent the savings, including debt financing/ repayment, or redirection of government expenditures. The method we use in this analysis is one of the most commonly applied, being both policy neutral and transparent in implementation. The first year impact under the core scenario is an increase in the labour supply of 110 FTEs and a reduction in the cost to government of \$18.9 million. As the reduction in total permanent disability compounds these numbers grow, reaching 773 FTEs and \$82.7m by 2025, 1,317 FTE and \$139.2m by 2030, and 2,404 FTE and \$252.3m by 2040. While the direct impacts of the change might seem small against the wider labour force the economic impacts are significant, especially considered against the relatively costless nature of the change. In net present value terms⁴ to 2040 the policy change is projected to increase Australian GDP by \$1.56 billion. The corresponding impact on GNI is projected to be \$1.42 billion. In absolute terms at 2040 the GDP impact is estimated to be \$405.7 million, representing approximately \$169,000 in GDP per additional full time equivalent worker in the labour force.

Over the period government spending is \$914.7 million lower in net present value terms – this is a combination of the **direct decreased** spending required on health services, and an **indirect increase** in revenue due to increased economic activity. Based on these figures, approximately 86% of the economic impacts measured are a result of the improved labour force outcomes rather than the savings to government, and in net present value terms the increased economic activity alone improves the fiscal position by \$203.6 million. The net present value direct savings of \$1.12 billion could be passed through as tax cuts as assumed in these scenarios or could be made available for alternate purposes.

The high side scenario with a benefit pool of 3,600 persons has correspondingly higher impacts. Under this scenario, the net present value of the policy change is an **increase in Australian GDP of \$4.06 billion**, and \$3.68 billion in GNI terms. Applying the same sensitivity analysis as for the core scenario, we find that the increased economic activity alone improves the fiscal position by \$529.3 million.

TABLE 07

SUMMARY OF CORE ECONOMIC MODELLING RESULTS

	GDP (\$m)	GNI (\$m)	Government spending (\$m)	GDP (\$m)	GNI (\$m)	Government spending (\$m)
NET PRESENT VALUE	\$1,559.1	\$1,416.3	-\$914.7	\$4,055.4	\$3,683.9	-\$2,379.3
IMPACT AT 2025	\$99.5	\$92.8	-\$67.1	\$258.8	\$241.3	-\$174.6
IMPACT AT 2030	\$187.7	\$168.9	-\$110.7	\$488.2	\$439.4	-\$288.0
IMPACT AT 2040	\$405.7	\$360.6	-\$191.9	\$1,055.3	\$937.9	-\$499.1

SOURCE: Cadence Economics estimates. All figures in \$AUD2017-18

⁴ All net present values calculated using a 7 per cent real discount rate

REFERENCES

According to the Australian Faculty of Occupational and Environmental Medicine (2011), *Realising the Health Benefits of Work: A Position Statement*, October.

Berecki-Gisolf, J., Clay, F., Collie, A., McClure, R (2012), *The Impacts of Aging on Work Disability and Return to Work: Insights from Workers' Compensation Claim Records, Journal of Occupational and Environmental Medicine, Volume 54, Number 3, 318-327.*

Carnide et al. (2015), Course of Depressive Symptoms Following a Workplace Injury: A 12 Month Follow-up Update, Journal of Occupational Rehabilitation, 26: 204-215.

Collie, A., Iles, R. and Di Donato, M.F (2017), The Cross Sector Project: Mapping Australian Systems of Income Support for People with Health Related Work Incapacity, Insurance Work and Health Group, Faculty of Medicine Nursing and Health Sciences, Monash University.

Collie, A., Lane, T., Hatherall, L. and McCleod, C (2015), Compensation Policy and Return to Work Effectiveness (ComPARE) Project: Introductory Report, Partnership for Work Health and Safety, University of British Columbia. Hanoch, G (1971), CRESH Production Functions, Econometrica, 39(5), 695-712.

Hertel, T (1997), Global Trade Analysis: Modeling and Applications. Cambridge University Press, Cambridge.

Industry Commission (1995), "Work, Health and Safety Report No. 47", Volumes I and II, AGPS, Canberra.

Kym, J. (2013), Depression as a psychosocial consequence of occupational injury in the US working population: findings from the medical expenditure panel survey, BMC Public Health 13:303.

Neil, A.L., Carr, V., Mackinnon, A., and Morgan, V.A (2016), *The Economic Impact of Psychosis: Unlocking the Black Box*, Menzies Institute for Medical Research, University of Tasmania.

Rice Warner (2017), Underinsurance in Australia 2017, summary of report at http://www.ricewarner.com/lifeinsurance-adequacy/, Accessed on 1 March 2018.

Safe Work Australia (2015), The Cost of Work-related Injury and Illness for Australian Employers, Workers and the Community: 2012-13, Canberra, November.

Safe Work Australia (2017), Australia's Workers' Compensation Statistics 2015-16, Comparative Performance Monitoring Report 18th Edition, Canberra.

Swiss Re (2016), Rehabilitation Watch 2016: Australia, Report published by Swiss Re Life and Health Insurance Australia Ltd, Sydney.

ABOUT US



ABOUT THE FSC

The Financial Services Council (FSC) has over 100 members. Our Full Members represent Australia's retail and wholesale funds management businesses, superannuation funds, life insurers, financial advisory networks and licensed trustee companies.

Our Supporting Members represent the professional services firms such as ICT, consulting, accounting, legal, recruitment and research houses.

The industry is responsible for investing more than \$2.7 trillion on behalf of 13 million Australians. The pool of funds under management is larger than Australia's GDP and the capitalisation of the Australian Securities Exchange and is the fourth largest pool of managed funds in the world.

The FSC promotes best practice for the financial services industry by setting mandatory Standards for its members and providing Guidance Notes to assist in operational efficiency.

Financial Services Council Level 24, 44 Market Street Sydney NSW 2000 T +61 2 9299 3022 E info@fsc.org.au W fsc.org.au



ABOUT BT FINANCIAL GROUP

BT Financial Group (BTFG) is the wealth management division of the Westpac Group, helping Australians from all backgrounds manage, grow and protect their money.

From our beginnings in 1969, we have fostered a strong culture of intelligent expertise and insights. Our brands have a strong financial services heritage in Australia and are some of the most trusted and respected names in the business. This gives you the assurance that you are dealing with experienced and knowledgeable experts, supported by the strength and stability of the Westpac Group.

We are a multi brand business which allows us to provide our customers with best in class wealth services.

BT Financial Group GPO Box 2675, Sydney, NSW 2001 T 1300 553 764 E info@btfinancialgroup.com W bt.com.au

cadence economics

ABOUT CADENCE ECONOMICS

Cadence Economics is a boutique consulting firm specialising in applied quantitative economic analysis.

We offer a comprehensive suite of services from cost benefit analysis, computable general equilibrium modelling, econometrics, economic forecasting to policy and regulatory advice.

The Directors of Cadence Economics have a wealth of experience working with government, private sector clients, industry associations, peak bodies and not-forprofits on a wide range of topics.



ABOUT METLIFE AUSTRALIA

MetLife is a leading provider of life insurance and retirement solutions, partnering with employers and super funds to help more Australians create a lifestyle they love – and providing help when they need it most.

Our 150-year history and global presence gives us the scale and experience to be a valued and trusted partner in business. We protect customers in more than 50 countries worldwide, and lead the market in corporate insurance solutions in the US, Japan, Latin America, Asia, Europe and the Middle East.

But while we're proud of this success, we know that the true sign of our worth is the difference we make to the lives of the customers we serve.

Cadence Economics Unit 108, 27 Lonsdale St Braddon, ACT 2612 T (02) 6174 0244 E contact@cadenceeconomics.com.au W cadenceeconomics.com.au **MetLife Australia** GPO Box 3319 Sydney NSW 2001

T 1300 555 625 E auservices@metlife.com W metlife.com.au

Disclaimer

This document provides information only and is based on the views of surveyed respondents. You should seek independent, professional advice before making any decision based on this information. Information in this report is believed to be accurate, however, subject to any contrary provision in any applicable law, neither UBS Asset

Management (Australia) Limited, the Financial Services Council, nor any related parties, their employees or directors, provide any warranty of accuracy or reliability in relation to such information or accept any liability to any person who relies on it.



cadence economics

ADDRESS

Level 24, 44 Market Street Sydney NSW 2000

PHONE +61 2 9299 3022

EMAIL info@fsc.org.au

WEB fsc.org.au