Mental Health Analysis

Summary Report

June 2021

Foreword

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For the first time, we have new data from the life insurance sector which shows the long term toll of mental ill-health in the Australian community.

Industry-wide data for income protection policies purchased through financial advisers gathered over the past 13 years (2007 to 2019) by KPMG for the Financial Services Council has found:

- Australians who have made a mental health claim are 18 times more likely to claim again in the future for mental health compared to someone who has never claimed for a mental health condition.

- Men are significantly more likely than women to claim again.

By way of comparison, the next likely condition to recur is cancer. Australians are seven times more likely to claim again, compared to those who have never claimed for that condition before.

The prevalence and recurrence of mental health claims paid is another piece of factual evidence that adds to the content of knowledge on mental illness and should give us even more impetus to broadly tackle its incidence.

All FSC life insurance members are bound by a mandated FSC standard that ensures customer facing employees receive education and training in mental health awareness. FSC life insurance members also employ mental health professionals in their claims teams, to deliver tailored assistance including occupational rehabilitation services and how to access treatment pathways. We have long advocated that life insurers should be allowed to provide more early support to help people with mental health conditions – the Government needs to change the law preventing this.

All of us need to do more. The report shows we need to drive down the rate of recurrence and examine how we can better support the recovery of people experiencing mental ill-health.

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Mental health is a topic of national importance, being the subject of a recent Productivity Commission Inquiry and a Royal Commission in Victoria. With the additional mental health and wellbeing challenges Australians are facing during the global pandemic, there has never been a more important time to build the evidence base and create a better understanding of the impact of mental ill-health.

The cost of mental health to our community and on the individuals who experience mental health conditions is significant. In the life insurance industry we see these challenges on a day to day basis as we work with claimants experiencing mental illness to assist them to return to health and work.

While analysis of longitudinal mental health claims data is only one aspect of a broader sphere including prevention, early intervention and high-quality treatment and support; understanding actual individual experience is crucial. The research we have performed here is the first of its kind in Australia and within the life insurance industry. The data clearly shows that compared to other causes of illness, individuals with mental health conditions are less likely for their recovery from disability to be permanent and are highly likely to become unwell again within 3-5 years.

Our research suggests that as a community (both the insurance sector and broader Australian society) we need to consider how we can do more to help individuals who have been disabled due to mental health conditions to sustain their recovery for the long-term. This would bring both health and financial dividends.

We hope that the insights documented in this report will help inform industry's activities as well as the broader community.

Disclaimer

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In particular, it is important to highlight that we could only analyse what was included in the data. For example, we have no visibility of mental health exclusions applied at the point of underwriting or the true underlying drivers of mental health conditions (such as due to personal traumatic events).

Furthermore, it is noted that:

- Experience varies significantly between companies.
- The composition of participants may change over time.
- Data may be resubmitted by companies.
- There are low numbers of claims in certain sub-divisions of the data.
- Underwriting policies (and standards), claims management practices, the mix of business in force and policy terms and conditions may change over time.

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- Hannover Life Re Australasia Ltd
- HCF Life Insurance Pty Ltd
- Integrity Life Australia Limited
- MetLife Insurance Limited
- NobleOak Life Limited
- QInsure Limited
- General Reinsurance Life Australia Ltd
- Pacific Life Re (Australia) Pty Limited
- Swiss Re Life & Health Australia Limited
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Contents

Introduction

Background

This report outlines findings from KPMG's research into mental health claims experience, conducted using Retail life insurance industry Disability Income (DI) claim and policy data for the period of 2007-2019.

The research was commissioned by the FSC to leverage industry data in assisting life insurers with the underwriting of customers with pre-existing mental health conditions.

Scope

The scope of the research, agreed with the FSC, was to gain insights into the effectiveness of the current underwriting processes for mental health claims and, in particular, answer the following two main questions to the extent that relevant information was available in the industry data:

1. If someone previously submitted a claim and recovered are they likely to subsequently make a mental health claim?

   - Does this differ if the prior claim was made for mental health or non-mental health conditions?

   - If the prior claim was a non-mental health claim, is the subsequent claim more likely to be for a particular mental health condition (e.g. stress, depression, other)?

   - If the prior claim was a mental health claim, is the subsequent claim more likely to be for the same or different condition (e.g. stress, depression, other)?

2. Is there evidence of the underwriting selection effect for mental health claims?

   - How does it compare to non-mental health claims?

   - Does it differ between main mental health conditions (e.g. stress, depression)?

Approach Overview

The industry data, used for the research, was assembled from multiple datasets, collected by KPMG over the 2007-2019 period. There were 10,555 mental health claims identified in the industry data.

The analysis to test the two hypotheses leveraged methodologies and tools previously used by KPMG in the graduation of the DI standard industry table, published in 2020. The analysis considered:

- Likelihood of people making single and multiple mental illness claims;

- Correlations between different mental illness conditions;

- Drivers of mental illness to the extent that they are captured in the collected data; and

- Relevant local and international studies of mental illness.

As part of the research, we also considered potential future improvements that could be made to enhance the analysis and provide further insights to the industry, for example, what additional industry data could be collected.

Further details of our approach are discussed in the Data and Methodology section.

Structure of the Report

The report has been structured into four sections:

- Section 1 – discusses key insights from the analysis of the impact of prior claim experience;

- Section 2 – discusses key insights from the analysis of underwriting selection effect;

- Section 3 – discusses our review of a sample of relevant international research papers; and

- Section 4 – discusses the data and methodology used for KPMG's research.

Executive Summary

Key Insights

Our research provided the following key valuable insights into the questions posed at its outset:

- There is strong evidence that the existence of a prior mental health claim increases the likelihood of a subsequent mental health claim.

- The relative likelihood of reoccurrence of same vs different mental health condition is similar.

- There is evidence of a stronger underwriting selection effect for mental health compared to other causes of sickness.

- The findings from KPMG's research are consistent with the findings published by the other researchers we reviewed who considered population data rather than insurance data.

We hope that the insights will assist the life insurance industry and other stakeholders with their understanding of mental health impacts on life insurance claims and inform future actions in terms of product design, underwriting, claims management and wellness initiatives. There are also potential future areas to improve and extend the analysis and to provide deeper insights, which would further support industry's response to the challenges posed by mental health.

Impact of prior claim experience

Our research indicated that there was strong evidence that the existence of a prior claim increases the likelihood of a subsequent mental health claim. In particular, the likelihood of a subsequent mental health claim was significantly higher (i.e. 18 times) than the likelihood of a mental health claim with no prior claim event regardless of the cause. Mental health claims were significantly more likely to occur for males than females and they were also significantly more likely to reoccur compared to other sickness claims.

While the industry data did not include detailed cause of claim information for the majority of claims, our research indicated that the relative likelihood of reoccurrence of same vs different mental health condition was similar.

The likelihood of a subsequent mental health claim occurring remains higher than the likelihood of a mental health claim occurring with no prior mental health claim regardless of the duration of time since the prior claim. However the likelihood of the subsequent mental health claim is in excess of 15 times higher (than if no prior claim) if there was a prior claim in the last 5 years.

Underwriting selection effect

An underwriting selection effect occurs where the likelihood of claim in the period after the person insured was underwritten is lower than in subsequent years due to the underwriting process identifying people at that stage as being healthy, or if not healthy, then loading them for the additional risk associated with their health condition/history or applying specific exclusions.

Our research indicated that there was evidence of an underwriting selection effect for mental health conditions. The effect was visible for the first year after a policy was written. The effect was also stronger than for other sicknesses, including relatively "more predictable" causes of claim such as musculoskeletal, cardio-vascular, genitourinary and endocrine.

Section 1
Analysis of the impact of prior claims experience

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Introduction

As highlighted in Section 2, underwriting takes into account a range of considerations when determining risk acceptance and the corresponding premium. In life insurance, one of these considerations is evidence of any prior episodes of a particular medical condition to be insured. In the case of cancer, this would include evidence of prior cancer treatments (e.g. type of cancer, types of treatments applied and current status).

Similar information requests are generally required for mental health conditions. Our understanding is that in general, insurers may apply exclusions for a mental health condition if there was a related episode in the last three to five years.

Prior claim experience

In light of the above, our research specifically considered insured people who had one or more claims recorded in the data. We used this information to assess whether there was a difference in claim incidence if a policyholder had or did not have prior claim history for key causes of claim. In particular, we looked at claim recurrence for mental health, cancer, musculoskeletal, cardio-vascular, digestive and accident causes of claim. We also looked at whether there was increased claim incidence for mental health if a person insured had prior claim(s) for each of the key other causes of claim.

Interpretation of charts in this section

The chart below is an example of charts shown in this section. The chart shows:

- the impact of a prior cancer claim on the likelihood of future cancer claims relative to the likelihood of a future cancer claim with no prior claim of any cause; and separately

- the impact of a prior cancer claim on the likelihood of a future mental health claim relative to the likelihood of a future mental health claim incidence with no prior claim of any cause.

These impacts were determined after "standardising" for factors such as age, gender, smoking status, etc (rating factors within the actuarial standard table). The credibility of the results depends upon the data volumes.

Relative impact of prior claim experience – cancer
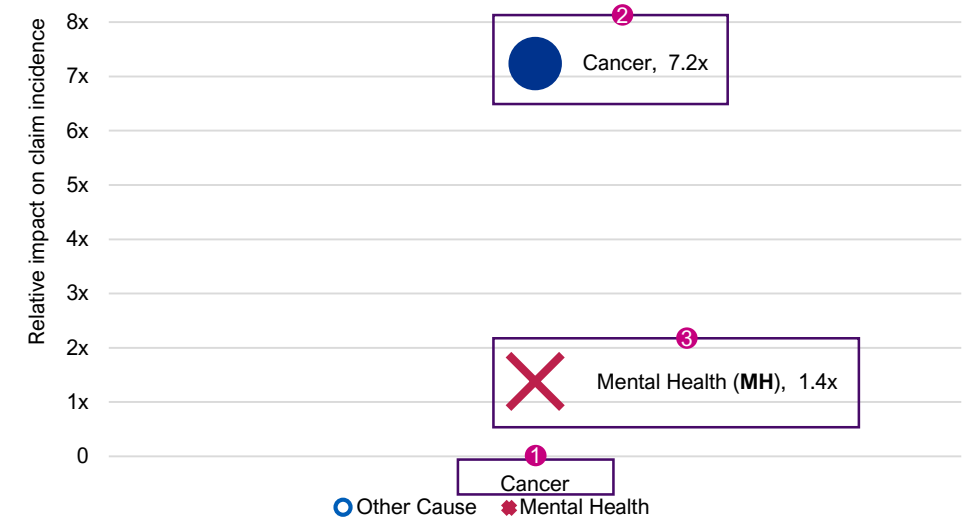
The chart can be interpreted as follows:

1. The horizontal axis indicates which claim cause in a prior claim is being considered. In the chart above, the impact of prior cancer claims is considered.

2. If a claimant had a prior cancer claim, they are 7.2 times (7.2x) more likely to make a cancer claim in the future compared to if they had no prior claim of any cause (after standardisation).

3. If a claimant had a prior cancer claim, they are 1.4 times (1.4x) more likely to make a mental health claim in the future compared to if they had no prior claim of any cause (after standardisation).

Given the above, a result of 1x would mean: the likelihood of someone who has previously claimed due to cancer making a future claim due to cancer is the same as someone who has no previous claims making a future claim due to cancer.

Key insights
– impact of prior claim experience (1/2)

The two charts show relative impacts of prior mental health claims (overall and separately for male and female claimants).

The following key insights can be drawn from the presented information:

1. The presence of prior mental health claims has a strong impact on the likelihood of a subsequent mental health claim. If a claimant had a prior mental health claim, they are approximately 18 times (18x) more likely to make a mental health claim compared to the likelihood of a person insured making a mental health claim if they had no prior claim of any cause (after standardisation). This insight is statistically significant. The 95% confidence interval for the finding is 16.1x to 19.2x. Results are considered to be statistically significant if the confidence internal does not overlap with 1x.

2. The impact of prior mental health claims on the likelihood of a subsequent mental health claim is stronger for male claimants compared to female claimants. In particular, a male claimant with a prior mental health claim is approximately 20 times (20x) more likely to make a mental health claim compared to a male claimant with no prior claim of any cause (after standardisation). For comparison, for female claimants this relativity is lower i.e. approximately 12 times (12x). The difference between the relative impacts for male and female claimants is statistically significant. The corresponding 95% confidence intervals are 17.8x to 21.7x and 9.1x to 17.1x respectively. Results are considered to be statistically significant if the confidence intervals do not overlap.

Relative impact of prior claim experience – mental health

Relative impact on claim incidence

Mental Health (MH)

✖ Mental Health

Relative impact of prior mental health claim experience – males vs females

Relative impact on claim incidence

Males   Females

✖ Males   ✖ Females
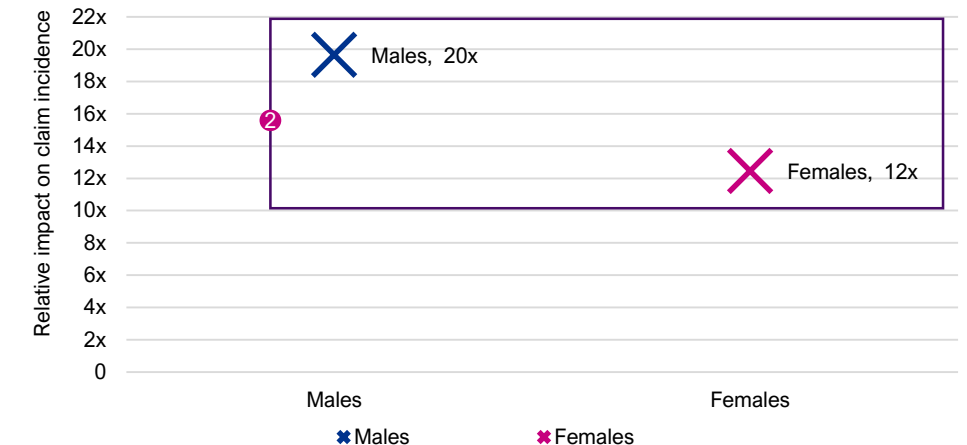
Key insights
– impact of prior claim experience (2/2)

The chart shows a comparison of relative impacts of prior claims for mental health compared to other key sickness related causes of claim as well as to an overall accident claim cause (all results shown have been rounded to the closest multiple). The credibility of the results as demonstrated by confidence intervals is shown in the table below the chart.

The table shows the relative impacts (as shown in the chart), the corresponding 95% confidence intervals, the likelihood of the relevant claim event occurring (i.e. claim incidence rates) if there were no prior claims, numbers of subsequent mental health claims (after the specified prior claim) and numbers of subsequent same cause claims (after the specified prior claim).

For illustration purposes, if we used the specified cause of claim for mental health, the likelihood of a mental health claim occurring where there was no prior claims is 0.13%. This implies that the likelihood of mental health claim occurring where there was a prior mental health claim is 17.6 x 0.13% or 2.29% based on 639 subsequent mental health claims.

The following key insight can be drawn from the presented information:

• The existence of prior claims increases the likelihood of future claims for all causes of claim considered. However the impact is significantly higher for mental health. The relative impacts of prior claim experience for all other causes considered are less than half of the impact for mental health, e.g. approximately 7x for cancer and digestive causes compared to approximately 18x for mental health. For other causes shown the differences are higher. There is also some evidence that prior claim experience for cancer and other causes can increase subsequent mental health claim incidence. However, the volume of claims (as shown in the sixth column of the table) is quite low and there is lower credibility for this insight.

Relative impact of prior claim experience – mental health vs other claim causes
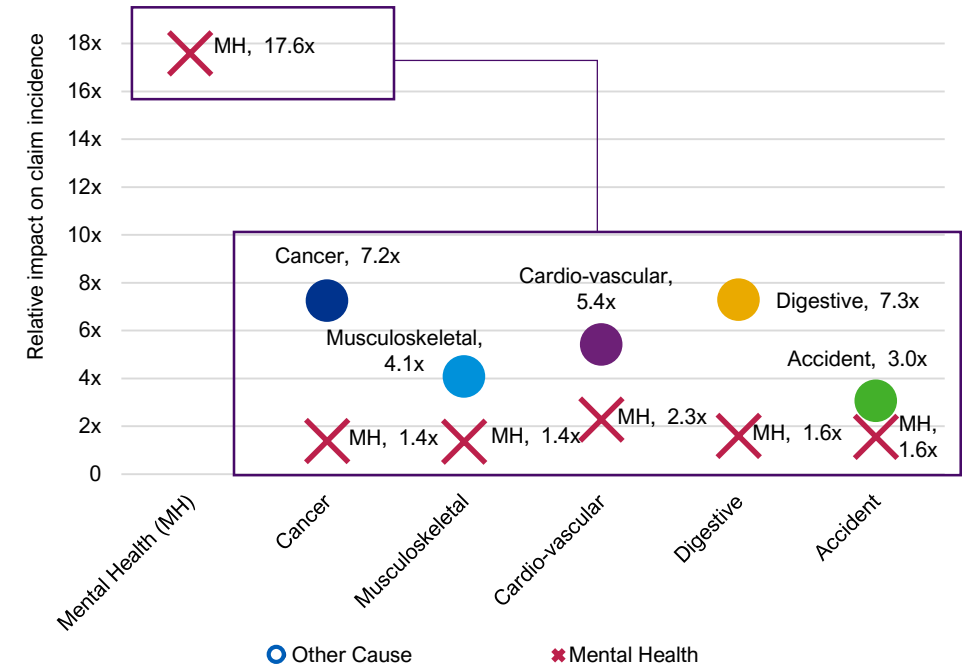
Cause of claim	Relative impact of prior claim experience	Lower confidence interval limit	Upper confidence interval limit	Claim incidence if no prior claim experience	Number of subsequent mental health claims	Number of subsequent claims of same cause
Mental Health	17.6x	16.1x	19.2x	0.13%	639	639
Cancer	7.2x	6.6x	8x	0.14%	62	503
Musculoskeletal	4.1x	3.8x	4.3x	0.23%	132	1,287
Cardio-vascular	5.4x	4.5x	6.5x	0.06%	65	130
Digestive	7.3x	6.1x	8.7x	0.06%	42	147
Accident	3.1x	2.9x	3.2x	0.51%	281	3,423

Key insights
– same vs different mental condition recurrence

Our analysis of the impacts of prior claims also considered more granular mental health causes, such as depression, stress and other conditions, with depression and stress being most common in the available data.

The credibility of this analysis is significantly lower as only 37% of mental health claim records provided to us included information on more detailed mental health causes and out of these only 4% had prior depression or stress claims. In other words, for every 1,000 mental health claims only 370 had detailed information and only 15 had a prior depression or stress claim.

The chart shows a comparison of relative impacts of prior mental health claims on the recurrence of same vs different mental health claims. Based on the volume of available data, we considered three granular mental health conditions i.e. depression, stress and other (i.e. grouping all other mental health conditions). The credibility of the results given the volume of available data is discussed below.

Noting the credibility warning above the following key insight can be drawn from the presented information:

- Overall, the relative likelihood of reoccurrence of same vs different mental health condition is similar. The chart indicates that the relative likelihood of the same mental health condition is slightly lower than the relative likelihood of a different mental health, i.e. 17x vs 19x. However, this difference needs to be considered in the context of the volume of available data and the implied 95% confidence intervals, i.e. 12x – 24x and 13x – 29x respectively, which indicate no statistically significant difference between same vs different results. It is also important to highlight that the "other mental health conditions" grouping includes a range of mental health conditions with potentially varying levels of correlation with stress and depression, which may distort the result.

Relative impact of prior mental health claim experience - same vs different mental health condition

The relativities (*) shown in the chart are based on weighted averages of relative individual impacts of prior depression, stress and other mental health conditions on the claim incidence of the same and different types of mental health conditions. For example, the same type relativity has been calculated as a weighted average across the following relative individual impacts:

- A prior depression claim resulting in a subsequent depression claim;

- A prior stress claim resulting in a subsequent stress claim: and

- A prior other mental health condition claim resulting in a subsequent other mental health condition claim.

Key insights
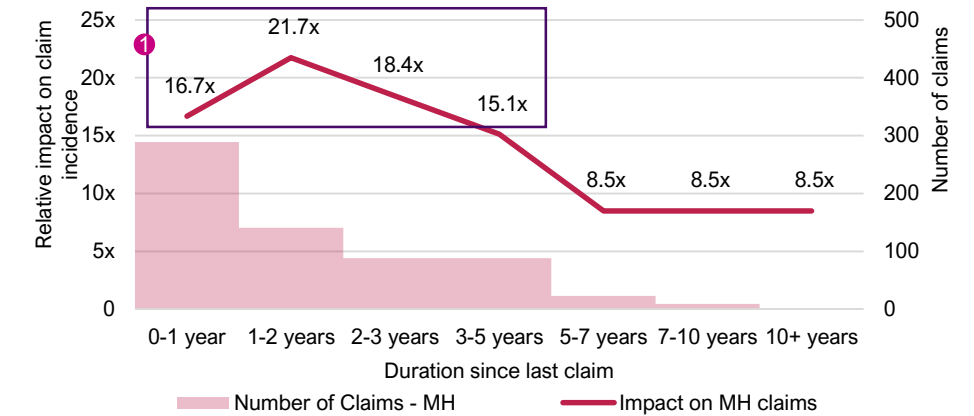## – duration since the last claim (1/2)

The two charts presented on this page and the two on the following page show impacts of duration since the last claim ended for mental health, cancer, musculoskeletal and cardio-vascular relative to the likelihood of a claim occurring with no prior claim of any cause. The analysis has all been standardised (see page 9).

For each chart, duration bands with fewer than 10 claims (7+ years for mental health, 5+ years for cancer, 7+ years for musculoskeletal and 3+ years for cardio-vascular) have been grouped together to reduce volatility of results for these bands.

The following key insights can be drawn from the presented information:

1. The likelihood of claim recurrence for mental health is significantly higher in the first five years since the last claim ended and it remains high beyond this period. The relative impact of duration since last claim is the highest in 2nd year (1-2 year band) after the termination of the last claim and then decreases. The peak in the 2nd year is not unexpected as insurers will typically re-open the previous claim if the person relapses within 6 months rather than open a new claim.

2. Compared to mental health, claim recurrence for cancer is lower, but the pattern of high claims is similar over time.

Relative impact of duration since last claim – mental health

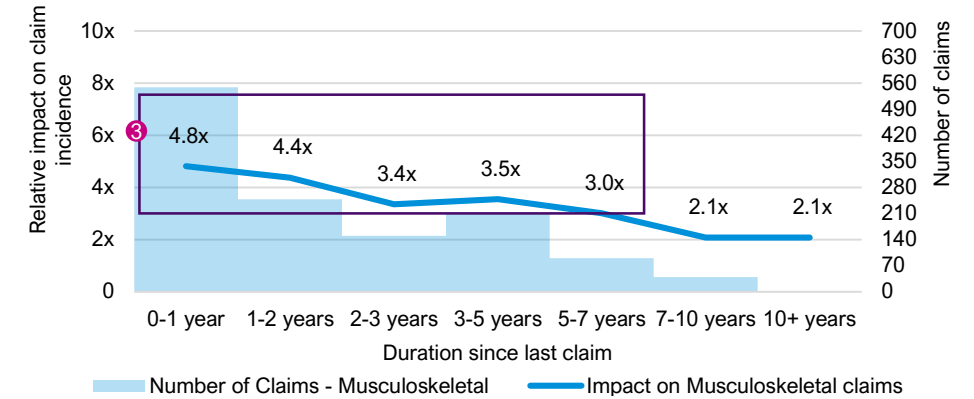**Relative impact of duration since last claim – cancer**
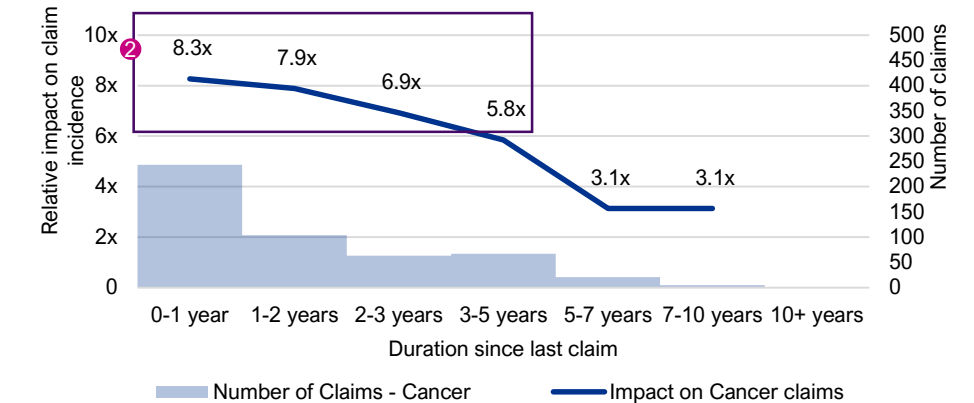
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Key insights
– duration since the last claim (2/2)

3. Compared to mental health, claim recurrence for musculoskeletal claims is significantly lower and the decrease in claim levels over time takes longer to occur.

4. Compared to mental health, claim recurrence for cardio-vascular claims is significantly lower but the pattern of high claims is similar over time.

Relative impact of duration since last claim – musculoskeletal

Relative impact of duration since last claim – cardio-vascular
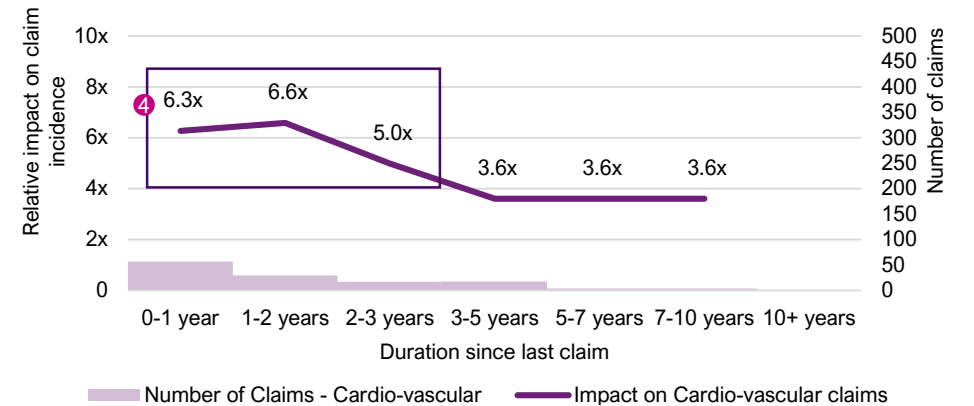
Section 2
Analysis of the underwriting selection effect

Introduction

Underwriting is a critical risk management process within a life insurance company. Underwriters assess the risk of potential insured people and determine how much coverage should be provided, how much the policyholder should pay for it or even whether the risk is insurable and could be accepted by the insurer. The underwriting process takes into account a range of considerations, the relevant ones for this discussion include the person's health and their familial history of health. Each insurance company has its own set of underwriting guidelines which are used in the process of determining whether or not the company should accept the risk.

Underwriting selection effect

An underwriting selection effect occurs where the likelihood of a claim in the period after the person insured was underwritten is lower than in subsequent years due to the underwriting process identifying people at that stage as being healthy or if not healthy then loading them for the additional risk associated with their health condition/history or applying specific exclusions. For example it is commonly considered that a person insured who has just been underwritten has a lower risk of being disabled and claiming due to cancer in the period following underwriting as when they were underwritten they did not have cancer and had no familial history or symptoms that might suggest they have a higher likelihood of getting cancer than the average insured person.

The strength of the underwriting selection effect differs between causes of claim, depending on the predictability of future claim incidence based on information available at the point of underwriting as well as insurer's underwriting approach. Importantly the full impact of the selection effect cannot be measured by considering the claim events of the insured people. It is likely that some potential people insured were declined cover and the insurer naturally does not know their subsequent level of disability. For the purpose of our research, we used the information available through the industry data collections, while noting its limitations given the context provided above. In particular, we analysed the underwriting selection effect for mental health and other causes of claim (e.g. cancer) by examining the impact of policy duration on claim incidence.

Interpretation of charts in this section

The chart below is an example of charts shown in this section. The chart shows the relative impact of policy duration on the overall sickness claim incidence after allowing for the impact of all other standard table variables and prior claim information (the black line).

The chart can be interpreted as follows:

1. The steeper the black line is in the first few years the stronger the underwriting selection effect. While not shown here, other charts, shown in this section, also include shaded bands around the impact lines representing confidence bands.

Relative policy duration impact – all sickness causes combined

2. All lines demonstrating the policy duration impact on claims, shown in this section, have been scaled to 100% (i.e. 1x) at Policy Year 0 to make comparisons easier.

3. The grey bars represent the number of all sickness claims for each policy year shown. In general, the higher the volume of claims, the greater credibility of the result.
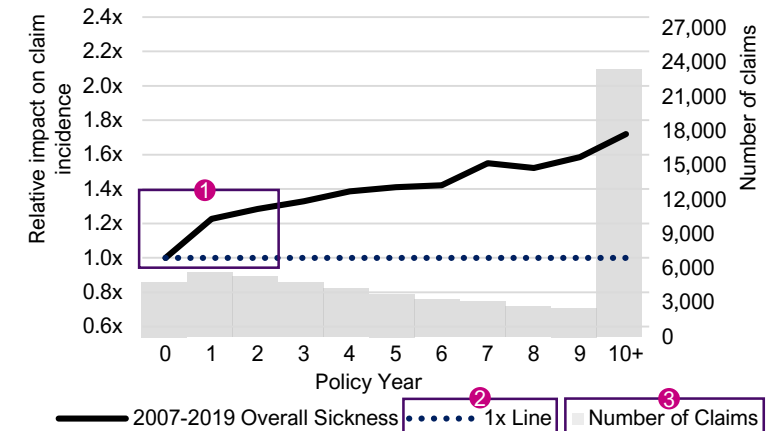
Key insights
– underwriting selection effect

The two charts show the policy duration impacts on claims for mental health compared to other sickness related causes of claim.

The top chart compares mental health to other sickness causes (all sickness causes excluding mental health) and to the overall sickness causes (all sickness causes combined).

The bottom chart compares mental health to "more predictable" causes (i.e. musculoskeletal, cardio-vascular, genitourinary and endocrine) and to "less predictable" causes (i.e. excluding mental health, musculoskeletal, cardio-vascular, genitourinary and endocrine). The term "predictable" refers to our general view on whether an underwriting approach is likely to be more or less effective in risk selection for particular key claim causes, given information available at the point of underwriting.

The following key insights can be drawn from the two charts:

1. There is evidence of a strong underwriting selection effect for mental health. The Mental Health line is steeper than the Other and Overall Sickness lines between policy duration years 0 and 1. As discussed earlier, this indicates that underwriting practices generally adopted by insurers are having a stronger impact on risk selection and claim incidence in the first policy year for mental health compared to other sicknesses.

2. This effect is stronger for mental health if compared to "more predictable" causes of claim. The Mental Health line is steeper than the other two lines shown. The analysis also shows that underwriting has a stronger impact for "more predictable" causes of claim line compared to the "less predictable" ones.

For all impact lines, we have included confidence bands (colour shaded areas). The more data is available for a particular cause of claim, the narrower the shaded area and the greater confidence in the result.

Relative policy duration impact – mental health vs other sickness causes

Legend: Overall Sickness — Mental Health — Other Sickness — 1x Line — Number of Claims
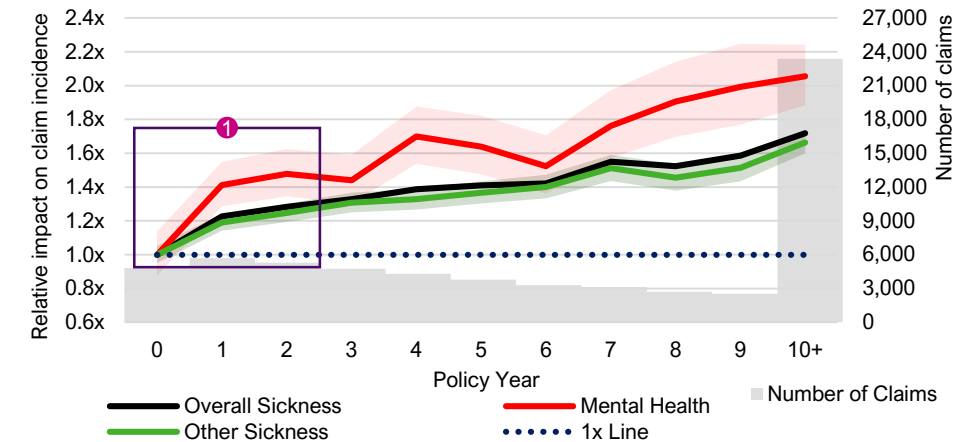
Relative policy duration impact – mental health vs "more and less predictable" causes

Legend: Mental Health — "More predictible" Causes — "Less predictible" Causes — 1x Line — Number of Claims
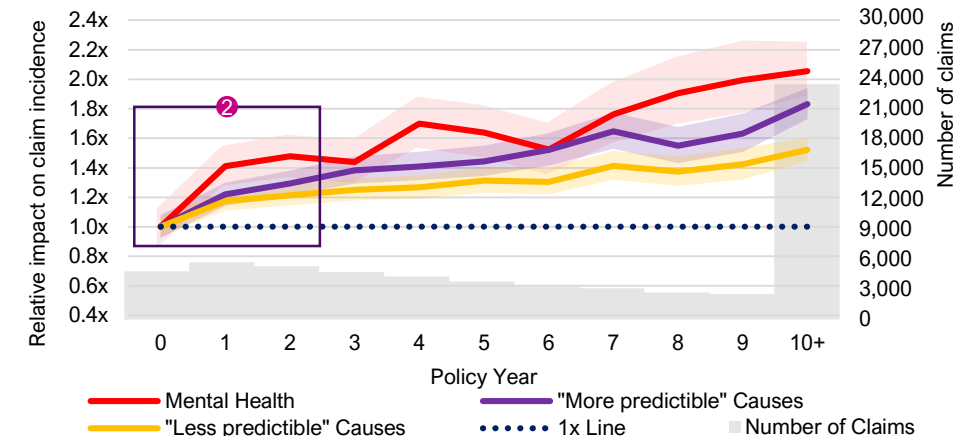
Section 3
Review of relevant research publications

Key findings from the review of relevant research

We reviewed a sample of international research papers on incidence and recurrence of mental health conditions, to test reasonableness of our findings.

We found three papers which provided relevant insights for our research. The key findings outlined in these papers were consistent with our findings, in particular:

- a history of mental health conditions significantly increased recurrence rates for these conditions with a high risk of recurrence over many years after the onset of the first condition; and
- the recurrence rates for mental health were higher than for other sicknesses.

Relevant extracts from these papers are provided here.

Rates and predictors of recurrent work disability due to common mental health disorders in the United States (2018), F.W. Gaspar, C.S. Zaidel, C.S. Dewa

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0205170

- *Results: Of the common mental disorders (CMDs), cases with bipolar (…) and depressive disorders (…) had the highest recurrence densities (…). These rates were more than three times higher than recurrence rates for other chronic disorders (e.g., diabetes, asthma (…)) and non-chronic disorders (e.g., injury, acute illnesses (…)). Individuals with CMD were also more likely to have a subsequent disability distinct from their mental health condition. Risk factors for recurrent CMD disability included being younger, being an hourly employee, living in a geographic area with more college graduates, having more previous psychiatric visits, having a previous work leave event, and the type of work industry.*

- *Conclusions: Results indicate that CMD patients may benefit from additional care and disability management both during and after their work absence to help prevent subsequent CMD and non-CMD related leaves.*

Recurrence of major depressive disorder and its predictors in the general population: results from The Netherlands Mental Health Survey and Incidence Study (NEMESIS) (2012), F. Hardeveld, J. Spijker, R. De Graaf, W. A. Nolen, A. T. F. Beekman

https://pubmed.ncbi.nlm.nih.gov/23111147/

- *Results: The estimated cumulative recurrence of major depressive disorder (MDD) was 13.2% at 5 years, 23.2% at 10 years and 42.0% at 20 years. In bivariate analysis, the following variables predicted a shorter time to recurrence: younger age, younger age of onset, higher number of previous episodes, a severe last depressive episode, negative youth experiences, ongoing difficulties before recurrence and high neuroticism. (…)*

- *Conclusions: In this community sample, the long-term risk of recurrence was high, but lower than that found in clinical samples. Subjects who had had an MDD had a long-term vulnerability for recurrence. Factors predicting recurrence included illness- and stress-related factors.*

Exploring Comorbidity Within Mental Disorders among a Danish National Population (2019; O. Plana-Ripoll, Carsten Bøcker Pedersen, Y Holtz, et al

https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2720421

- *Results: (…) All mental disorders were associated with an increased risk of all other mental disorders when adjusting for sex, age, and calendar time (…). The hazard ratios were temporally patterned, with higher estimates during the first year after the onset of the first disorder, but with persistently elevated rates during the entire observation period. Some disorders were associated with substantial absolute risks of developing specific later disorders (…).*

- *Conclusions: Comorbidity within mental health disorders is pervasive, and the risk persists over time. (…)*

Section 4
Data and methodology

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Data and methodology

Data

The research used de-identifed individual policy and claim level Retail life insurance industry DI claim and policy data for the period of 2007-2019. The data was collected by KPMG on behalf of the FSC over a number of years for the purpose of performing regular analytics on the claims and identifying emerging trends across the industry. The data was assembled from multiple datasets collected over the 2007-2019 period under different data specifications.

There were 10,555 mental health claims identified in the dataset and 2.6 million policies across the 2007-2019 period. This volume of data was sufficient to conduct the overall analysis. However, we note that some more granular cuts of data had less data available resulting in increased uncertainty around the identified insights. We have provided confidence bands and intervals around the key results to demonstrate the relative credibility of the insights.

There are historical changes in the data (e.g. changes in claim and policy identifiers due to insurers' system changes), which meant that some claims and policies could not be traced between periods.

We traced policies and claims across the periods by matching policy and claim identifiers provided in the data. Where this did not provide reasonable match rates after allowing for lapses and new business, various other methods were tested and adopted. These included: transformation and/or truncation of policy identifiers, using alternative fields for matching purposes, and in one instance we contacted an insurer for guidance on the policy mapping.

While we did not quantify the impact of not being able to trace some claims and policies between periods., it is unlikely these would have changed the key insights from our research.

Given the long timeframe and changes in data specifications, completeness of data also varied between periods and contributors. This meant that were not able to conduct some further analysis to gain deeper insights, for example, around the underwriting exclusions applied or more detailed cause of claim. In particular:

- only 37% of mental health claims had a more detailed "2nd chapter level" cause of claim, identifying more granular mental health conditions such stress, depression; and

- more than 95% of policies with exclusions flagged as Unknown.

Other relevant information such as detailed underwriting data is not currently included in the industry data collection. This information could provide further deeper insights around the impacts of underwriting of mental health and other causes of claim.
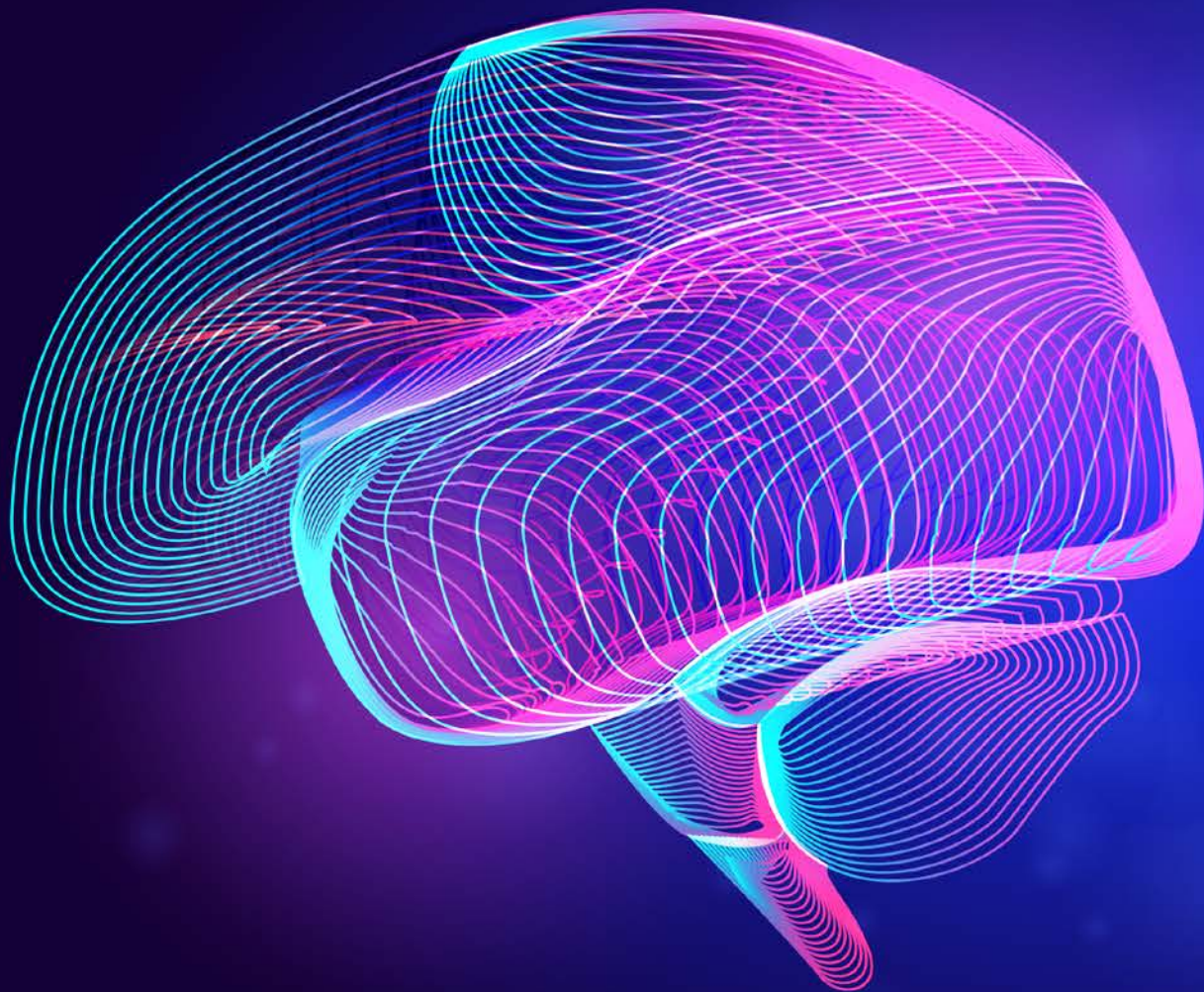
Methodology

The research leveraged KPMG's tools and processes used for the graduation of DI standard life insurance industry tables.

Details of the methodology underlying these tools and processes are described in the report "Development of the FSC-KPMG Australian Disability Income Claims Table", issued 30 June 2020.

Specifically, we leveraged a combination of Generalised Linear Modelling and Gradient Boosting Machine techniques to conduct the quantitative analysis in our research. These techniques were used to understand and test significance of variables and relationships between variables in explaining incidence of mental health claims and to investigate questions posed at the outset of the research. In our research, we focused on the variables included in the standard industry table (i.e. the FSC-KPMG 2014-2018 Australian Disability Income Claims Table) as well as prior claim experience.

Following the quantitative analysis, we reviewed reasonableness of key insights, given our experience, discussions with underwriting and claims management specialists and review of a sample of research papers on incidence and recurrence of mental health conditions.

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