

May 2012

# Macquarie Active

Review of Macquarie Active – April 2012

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## Table of Contents

1. Executive summary .....	3
1.1 Background.....	3
1.2 Macquarie Active.....	3
2. Background .....	5
3. Product features.....	6
3.1 Example - cancer .....	6
3.2 Differences in policy conditions for specific medical conditions .....	7
3.3 Strengths and weaknesses of Macquarie Active coverage .....	8
3.4 Death buyback and trauma reinstatement .....	9
4. Price.....	11
5. Suitability for different customers.....	12
6. Financial strength.....	13
Appendix A Detailed comparison of key benefits.....	14
Appendix B Price comparisons .....	22

## 1. Executive summary

### 1.1 Background

Rice Warner Actuaries (Rice Warner) has been engaged by Macquarie Life to review the *Macquarie Life Active (Macquarie Active)* product and comment upon its suitability in the risk insurance market. In particular, we have been asked to consider the types of customers and circumstances when the product is likely to be a better option to provide the required cover than alternative products available.

Our report is intended for public use, in particular by dealer groups and advisers.

Whilst we have been remunerated by Macquarie Life for this work, the views expressed are our own independent views.

### 1.2 Macquarie Active

Macquarie Active provides death, trauma and disability benefits, including those traditionally classified as TPD benefits, within a package that enables multiple benefits to be paid from within the overall initial cover amount, but generally with a minimum benefit<sup>1</sup> paid even if the initial cover amount is exhausted.

It is particularly suited to clients who wish to obtain cover for death and a comprehensive range of medical conditions at an economic price, but with:

- benefits related to the severity of the medical condition concerned and the potential consequential personal costs
- a product that provides partial benefits for a wide range of medical conditions when in their early stages of development
- a product under which there are objective criteria for determining the eligibility to receive benefits.

There are circumstances when competing products available in the market will provide higher benefits than Macquarie Active. However, the focus of Macquarie Active is to provide more comprehensive cover at a lower cost to the insured by paying benefits progressively as and when the medical condition becomes more severe.

Benefits are closely aligned to typical real needs after an illness to allow a higher overall sum insured to be obtained for a given premium.

There may also be circumstances when Macquarie Active pays higher overall benefits than traditional products, such as under the *Claim Protector* feature when multiple payments may be made which, overall, exceed the initial cover amount.

Events leading to total and permanent disability (TPD) of the insured are assessed primarily on the basis of the medical outcomes rather than being related to the insured's inability to return to work. Macquarie Active thus blends the TPD product and trauma products into one *Health Events cover*. A Health Event called 'occupational impairment' is used to assess claims like a conventional TPD claim, but only if no other benefit is payable (even if the other benefit is for a small amount).

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<sup>1</sup> Under the *Claim Protector* feature.

The cost of Macquarie Active (in terms of the premium paid by the client for a male non-smoker) can be between 18% and 52% cheaper than a traditional adviser-sold risk insurance product providing death, own occupation total and permanent disability (TPD) and trauma benefits, albeit that the products are not directly comparable in terms of benefits. See Section 4 (Price) for more details.

Macquarie Active is less suited to circumstances where the client would wish to use their illness as an opportunity to change their lifestyle after they suffer the medical condition even if they recover, for example by paying off their mortgage or other debts or no longer working.

This report was prepared and peer reviewed for Macquarie Life by the following consultants.

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17 May 2012

## 2. Background

Rice Warner is an independent firm of consulting actuaries specialising in advice to life companies and dealer groups on life insurance and wealth management products.

We have been engaged by Macquarie Life to provide our views on the Macquarie Active product and its suitability for clients with different risk insurance needs.

We consider that the value of an insurance product should be assessed in terms of the overall package offered, including:

- the protection and benefits provided and their cost
- the financial strength of the insurer, to give confidence that they will pay claims
- the level of service provided by the insurer, for example, at the time of application and in the event of a claim, ongoing assistance and the timeliness with which services are provided.

This report focuses on the first two of these attributes. We have not considered adviser commissions.

Details of the product are set out in the product disclosure statement (PDS). This report reflects the PDS dated 12 May 2012.

In summary, Macquarie Active is a packaged product providing lump sum benefits in the event of:

- death or terminal illness
- the onset of specific health conditions.

Benefits will be paid for non-specific conditions for two of the Health Events under 'Body Systems: other' namely, activities of daily living<sup>2</sup> and occupational impairment. Benefits are only assessed under these definitions if no other benefit is payable. As such, these definitions offer a 'catch all' benefit to the policy holder.

Macquarie Active also provides optional income protection and a range of ancillary benefits such as a child's insurance option.

The income protection cover is the same as that provided under the Macquarie FutureWise product and can be compared directly with other similar products available in the market via the various proprietary risk insurance research tools. It will therefore not be considered further in this report.

The lump sum benefits are integrated so that the client chooses an overall sum insured and this may be paid out either on death or on the occurrence of one or more Health Events. As each benefit is paid, this reduces the amount remaining to be paid upon the occurrence of subsequent events. However, up to age 65 there is an underpin<sup>3</sup> amount (25% of the original sum insured) below which the sum insured will never fall for claims that are not for death (or terminal illness).

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<sup>2</sup> Macquarie Active has a more comprehensive list of activities under the activities of daily living definition compared with competing products.

<sup>3</sup> Under the Claim Protector feature.

### 3. Product features

A straightforward side-by-side comparison of the features of Macquarie Active against those of other products available in the market is not directly relevant for three reasons:

- Traditional trauma products provide benefits on diagnosis and outcome of specific health conditions, whereas Macquarie Active provides different levels of benefit depending on the medical outcome and its severity.
- Traditional total and permanent disability (TPD) products provide benefits in circumstances such as the insured being unlikely ever to be able to engage in their own occupation or any other occupation for which they are reasonably suited through education, training and work experience. However, Macquarie provides benefits in the event of specific medical conditions which have the effect of rendering them totally and permanently disabled. These benefits are severity based and so the full sum insured will not be paid in all cases. The occupational impairment benefit, whilst equivalent to competing TPD products, is only paid if no other benefits are payable under the alternative conditions.
- For loss of musculoskeletal functions the full benefit will be paid if the event leads to a defined inability to carry out work activities and to earn at least 75% of pre-disability income.

This means that there are circumstances where traditional risk insurance products will pay higher benefits and others where Macquarie Active may pay higher or more benefits and these may be paid earlier in the development of the medical condition.

Table 1 summarises the key overall differences between the designs of traditional risk insurance products and Macquarie Active.

**Table 1. Key design differences**

	Traditional products	Macquarie Active
<b>When benefits are paid</b>	Diagnosis of specified medical condition, sometimes defined in relation to specific medical classifications but often subject to interpretation.	Upon occurrence of a medical condition that meets the specific medical classification, so less scope for differing interpretations of eligibility and less reliance on doctor's subjective opinions. Hospitalisation benefit not covered in many other products.
<b>Level of benefits</b>	Often either full (sum insured) or partial benefits.	Progressive payments as the severity of the condition increases.
<b>Costs</b>	Reflect the full/partial benefit structure.	Lower due to lower benefits where the progression of the medical condition is contained.

An example of the impact of these design differences is set out below.

#### 3.1 Example – cancer

Typical competing products pay the full sum insured if the insured life is diagnosed as having a malignant tumour characterised by:

- uncontrolled growth and spread of malignant cells

- invasion and destruction of normal tissue.

The tumour must also:

- require treatment by surgery, radiotherapy, chemotherapy, biological response modifiers, or any other major treatment, or
- be totally incurable.

For example, this may be classified by the relevant medical specialist as Stage III under the TNM classification system.

In these circumstances, Macquarie Active may pay a benefit of only 65% of the initial cover amount, for example, where curative treatment is continuing.

However:

- part of the 65% benefit may be paid earlier under benefit categories E (5%), D (20%) and C (40%) if the disease was identified earlier
- the benefit would be topped up to 100% of the initial cover amount if all treatment options were to fail and progression of the cancer could still be identified.

In reality, most early stage malignant tumours can be extracted or removed using surgery, with little subsequent risk of the cancer spreading to other parts of the body.

Therefore, while the insured person would undoubtedly be shocked and concerned for their future on hearing the diagnosis, they would often incur little financial loss as a result other than loss of earning for a period whilst in hospital and recuperating.

Thus, depending on the initial amount of cover selected under the Macquarie Active product, a lower level of benefit may be necessary than if the cancer develops to the stage where it is incurable.

However, small benefits may be paid at early stages in the development of the condition which may not be paid under competing products.

It is assumed that the client and their adviser will discuss situations of this kind when deciding on the appropriate level of initial cover. This is clearly both a critical and sensitive conversation.

### 3.2 Differences in policy conditions for specific medical conditions

Similar comparisons between traditional products and Macquarie Active apply for other medical conditions.

Appendix A (Detailed comparison of key benefits) to this report lists the more common conditions for which trauma benefits may be paid under either traditional trauma and total and permanent disability products or Macquarie Active. It compares the circumstances when a valid claim can be made under each type of product.

Overall, Macquarie Active provides benefits that are more closely aligned with the severity of the medical condition concerned and with the resulting costs and loss of earning capacity incurred by the insured person. It also provides partial benefits in a broader range of circumstances than competing

products in the early stages of the development of the medical condition concerned. Overall, these differences result in lower premium costs.

Therefore, all else being equal, the product represents better value for clients who:

- seek cover to meet their additional financial needs in the event of a health issue but at an economic price, or
- given their budget for life insurance premium, seek a higher sum insured for the major health events than might be obtained under some competing products.

It is less suited to circumstances where the client would wish to use their illness as an opportunity to change their lifestyle after they suffer the medical condition even if they recover, for example by paying off debts or no longer working.

### 3.3 Strengths and weaknesses of Macquarie Active coverage

Macquarie Active pays specific benefits on a broader range of conditions than the competing products, albeit potentially at a lower level of sum insured. There are some conditions covered by existing trauma products that are not directly referred to under Macquarie Active. However, these conditions would be covered elsewhere in the policy.

Conditions not covered explicitly under Macquarie Active and the alternative Macquarie Active conditions under which a benefit may be paid are set out in Table 2.

**Table 2. Coverage strengths and weaknesses**

Conditions not covered that are typical across the market	
Condition	Macquarie Active - alternative policy conditions under which benefit may be paid
Encephalitis	Would be covered under the hospitalisation benefit if qualifying conditions are met and if any complications occur then it would be covered under the brain and nerves benefit, such as coma or under inability to perform activities of daily living
Major head trauma	Would be covered under the brain and nerves benefit, for example severe cognitive impairment, coma, severe epilepsy or brain surgery. Ultimately it may also be covered under activities of daily living
Pulmonary hypertension	Would be covered under heart and artery conditions such as severe cardiac congestive failure
Bacterial meningitis and meningococcal	Would be covered under the hospitalisation benefit if qualifying conditions are met

The following conditions covered by Macquarie Active that are not typically covered under traditional products:

- severe epilepsy
- addition of psychiatric conditions payable progressively
- all chronic neurological conditions



- wider coverage of respiratory disease
- wider coverage of connective tissue diseases
- much wider coverage of all musculoskeletal conditions and payable progressively
- acute renal failure
- hospital admissions, stay and ICU (see below).

One of the strengths of the Macquarie Active product is the hospital admissions benefit. This is designed to cover all conditions which are not specified elsewhere in the product, but which result in the insured life being hospitalised for at least four weeks.

A 5% (of the initial cover amount) benefit is paid if in hospital for four weeks of which at least one week is in intensive care and a 20% (of the initial cover amount) benefit is paid if lives insured are in hospital for at least five weeks, including at least three weeks on assisted mechanical ventilation. This feature is rare in the market currently.

Because Macquarie Active defines benefits in terms of medical outcomes rather than diagnosis of specific conditions, it will pay benefits upon events which do not fall explicitly under any of the listed benefits of many competing products, providing a greater breadth of cover:

- Benefits will be paid upon events leading to qualifying outcomes if a medical diagnosis or surgery subsequently causes minor impairments. This may not be the case under conventional products either for the diagnosed condition or for the minor impairments.
- A benefit will be paid if an event leads to an inability to perform activities of daily living. This may not be paid under conventional products because the inability may not be severe enough to qualify for the activities of daily living (ADL) definition included in conventional products. Macquarie Active has a much more comprehensive list of activities under the ADL definition. There are six main categories, each containing a list of specific tasks. The ADL categories, specific tasks and required scores are all taken into account when determining the level of benefit paid.

If Macquarie Active does not define a condition or will not pay a benefit for a specific condition there are two 'catch all' definitions that aim to ensure severe disability is always covered namely: activities of daily living and occupational impairment. Benefits are only assessed under these definitions if no other benefit is payable.

### 3.4 Death buyback and trauma reinstatement

Competing TPD and trauma products provide either deferred<sup>4</sup> or immediate<sup>5</sup> buyback which allows the life insured to repurchase reduced death cover after a TPD or Trauma benefit is paid. For some policy holders this is an important feature to provide for their families. Macquarie Active does not currently offer this feature. However, Macquarie Active does allow the policy holder to take out additional life cover to help cater for this need.

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<sup>4</sup> Deferred buyback of death cover allows the life insured to repurchase the reduced death cover 12-months after the TPD or trauma benefit is paid.

<sup>5</sup> Immediate buyback of death cover normally allows the life insured to repurchase the reduced death cover 14 days after the TPD or trauma benefit is paid.

Competing trauma products provide trauma reinstatement<sup>6</sup> which allows the life insured to repurchase reduced trauma cover after a trauma benefit is paid. However, this feature is not available for Macquarie Active product.

Macquarie Active does offer the Claim Protector feature. After a claim, this feature will increase the remaining cover to be at least 25% of the indexed initial cover amount, so that subsequent Health Events (that are not death or terminal illness) will result in a benefit being paid. As such the Claim Protector feature acts as a trauma reinstatement option for up to 25% of the initial cover. The Claim Protector can be reinstated more than once, before the age of 65 and so provides 25% floor, regardless of the number of claims, subject to specified limits.

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<sup>6</sup> Trauma reinstatement allows the life insured to repurchase the trauma sum insured 12-months after the trauma benefit is paid, cover is usually offered with some exclusions.

## 4. Price

Appendix B (Price comparisons) provides price comparisons between Macquarie Active and a selection of key competitor products currently available in the adviser market. Whilst all the graphs apply to clients in white collar occupations where the sum insured is \$500,000, the price relativities are similar for other occupation groups and levels of cover.

Each graph compares the price of competitor products as a percentage of the price for Macquarie Active. Competitor product prices are for 'linked' death, TPD and trauma cover, so the death sum insured is reduced by the amount of any TPD or trauma claim.

The graphs show prices for a range of competitor products and median prices for two groups of products:

- all 'fully featured' products<sup>7</sup> in the adviser market
- all standard products<sup>8</sup> in the adviser market.

Total and permanent disability prices have been taken as those for 'own occupation' cover as this is the definition that will be applied for white collar occupations in Macquarie Life Active.

Although the comparison is not entirely 'like-for-like' as the benefits payable under Macquarie Active can be different from those payable under competing products, the graphs show that, across different ages, for a male non-smoker:

- the median standard product across the market is between 18% and 46% more expensive than Macquarie Active
- the median fully featured product across the market is between 23% and 52% more expensive than Macquarie Active.

Therefore, the product represents better value for clients who:

- seek cover to meet their additional financial needs in the event of a health issue but at an economic price
- given their budget for life insurance premium, seek a higher sum insured for the major health events than might be obtained under some competing products.

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<sup>7</sup> 'Fully featured' products include cover for all the medical conditions in standard products plus a range of other conditions such as Alzheimer's disease, coma, occupationally acquired hepatitis or HIV/AIDS, lung failure, major head trauma, motor neurone disease, multiple sclerosis, muscular dystrophy, advanced Parkinson's disease, systemic sclerosis and systemic lupus erythematosus. They also include a range of partial benefits.

<sup>8</sup> Standard trauma products include cover only for the major trauma conditions such as heart, cancer, stroke kidney and paralysis conditions.

## 5. Suitability for different customers

Macquarie Active is particularly suited to clients who wish to obtain cover for death and a comprehensive range of medical conditions at an economic price but with:

- benefits related to the severity of the medical condition concerned and the potential consequential personal cost
- a product that provides partial benefits for a wide range of medical conditions when in their early stages of development
- a product under which there are objective criteria for determining the eligibility to receive benefits.

It is less suited to circumstances where the client would wish to use their illness as an opportunity to change their lifestyle after they suffer the medical condition even if they recover, for example, by paying off their mortgage or other debts or no longer working.

For example, conventional trauma products may be more suited to some clients who, in the event that they suffer a health scare such as heart attack, would wish to cut down their working hours or stop work altogether for lifestyle reasons, even if they are still capable of working.

## 6. Financial strength

Recent events in international financial markets have highlighted the importance of placing business with insurers with the financial strength and risk management processes to give confidence in their ability to meet claim payment.

Macquarie Life has an 'A-' rating from Standard & Poor's, for both financial strength and insurance claims.

## Appendix A Detailed comparison of key benefits

**Table 3. Comparison of key trauma benefits**

Trauma type conditions	Typical trauma premier cover	Macquarie Active
Cancer	<p>A typical premier trauma cover pays out full benefits for the following:</p> <ul style="list-style-type: none"> <li>▪ one or more malignant tumours with specific mention of: <ul style="list-style-type: none"> <li>– malignant lymphoma</li> <li>– Hodgkin’s disease</li> <li>– bone marrow disorders</li> <li>– leukaemia</li> </ul> </li> <li>▪ cancer that is confirmed by pathology tests and characterised by uncontrollable growth and spread, i.e. metastasisation</li> <li>▪ carcinoma in situ of the breast if it results directly in the full removal of the breast</li> <li>▪ prostate cancer at TNM Classification of T1 or with a Gleason score of 7 or results directly in the full removal</li> <li>▪ chronic lymphocytic leukaemia greater or equal to RAI stage 1.</li> </ul> <p>A typical premier trauma cover pays out partial benefits for the following:</p> <ul style="list-style-type: none"> <li>▪ carcinoma in situ in up to 10 different male and female organs such as testicles, breasts and cervix</li> <li>▪ chronic lymphocytic leukaemia classified as RAI Stage 0</li> <li>▪ malignant melanomas which can be less than 1.5mm maximum Breslow thickness and also less than Clark level 3 depth of invasion as determined by histological examination: <ul style="list-style-type: none"> <li>– prostate cancer which is histological described as TNM classification T1 (or equivalent)</li> </ul> </li> </ul>	<p>Macquarie Active explicitly categorises cancers, and pays out severity A (100%) benefit if all interventionist treatments have been exhausted and failed AND progression of cancers can be identified, which is an additional requirement on top of the conventional medical definitions.</p> <p>Macquarie Active pays out severity B (65%) benefit for the following conventional medical definitions:</p> <ul style="list-style-type: none"> <li>▪ solid tumour cancers that have metastasised and classified as stage III or above based on TNM classification</li> <li>▪ lymphomas type cancers such as Advanced Lymphomas, Hodgkin’s Lymphomas and non-Hodgkin’s Lymphoma classified as Ann-Arbor stage III or above</li> <li>▪ malignant brain tumour classified as Grade III or above based on WHO grading system</li> <li>▪ leukaemia’s type cancers such as Leukaemia and lymphocytic leukaemia classified as RAI stage 3 or above</li> <li>▪ others cancers such as multiple myeloma classified as stage 3 on Durie Salmon scale or new ISS, requiring interventionist therapies.</li> </ul> <p>Macquarie Active explicitly categorises cancers and pays out severity C (40%), D (20%), and E (5%) benefit for the following:</p> <ul style="list-style-type: none"> <li>▪ solid tumour cancers including: <ul style="list-style-type: none"> <li>– cancer with the presence of one or more malignant tumours</li> <li>– carcinoma in situ of the breast results directly in appropriate procedures to arrest the spread</li> <li>– prostate cancer at TNM Classification T1 and a Gleason score greater than 6 or results directly in appropriate procedures to arrest the spread</li> <li>– carcinoma in situ of six different female organs such as ovary and cervix</li> </ul> </li> </ul>

Trauma type conditions	Typical trauma premier cover	Macquarie Active
		<ul style="list-style-type: none"> <li>– the presence of one or more melanomas which are classified as melanoma in situ or stage T1aN0M0.</li> <li>▪ lymphomas type cancers which are classified as Ann-Arbor stage II or I</li> <li>▪ malignant brain tumour classified as Grade II or I based on WHO grading system</li> <li>▪ leukaemia type cancer including chronic lymphocytic leukaemia classified as RAI stage 2 or 1, with the explicit exclusion of chronic lymphocytic leukaemia classified as RAI Stage 0</li> <li>▪ other cancers such as multiple myeloma classified as stage 2 or below on the Durie Salmon scale or New ISS, requiring interventionist therapies.</li> </ul>
Heart attack	<p>A typical premier trauma cover pays out full benefits for a heart attack if diagnosis is supported by the conventional clinical examinations such as new electrocardiographic changes, elevation of Troponin I where results are consistent with myocardial infarction.</p> <p>A select few insurers will pay full benefits for the more generous Universal Heart Attack definition. Being the death of heart muscle as a result of inadequate blood supply to the relevant area, confirmed by a cardiologist and evidenced by:</p> <ul style="list-style-type: none"> <li>▪ Typical rise and/or fall of cardiac biomarkers with at least one value above the 99<sup>th</sup> percentile of the upper reference range.</li> </ul> <p>PLUS one of the following:</p> <ul style="list-style-type: none"> <li>▪ signs and symptoms of ischaemia which are consistent with myocardial infarction</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>▪ new serial ECG changes with the development</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>▪ imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.</li> </ul>	<p>Macquarie Active pays out severity A (100%) benefit if a heart attack results in:</p> <ul style="list-style-type: none"> <li>▪ the conventional medical definitions in other products</li> <li>▪ permanent and irreversible left ventricular ejection fraction of less than 30%</li> <li>▪ on minimal six-months ongoing therapy</li> <li>▪ significant and irreversible physical impairment to the degree of Class III or above of the New York Heart Association Functional Classification System of cardiac impairment.</li> </ul> <p>Macquarie Active pays out severity C (40%) benefit for heart attack if diagnosis is supported by the conventional clinical examinations such as new electrocardiographic changes, elevation of Troponin I, where results are consistent with myocardial infarction. This definition is consistent with the universal heart attack definition offered by a select number of other products.</p>

Trauma type conditions	Typical trauma premier cover	Macquarie Active
Heart - bypass surgery	<p>A typical premier trauma cover pays out full benefits for coronary artery by-pass surgery excluding angioplasty and intra-arterial procedures.</p> <p>A typical premier trauma cover pays out partial benefit for angioplasty, commonly up to 20% of the full benefit subject to a maximum of \$20,000.</p>	<p>Macquarie Active pays out severity C (40%) benefits for coronary artery bypass surgery excluding angioplasty and intra-arterial procedures.</p> <p>Macquarie Active pays out severity E (5%) benefits for angioplasty subject to a maximum of \$40,000.</p>
Heart - blockage of arteries	<p>A typical premier trauma cover pays out full benefits for triple vessel angioplasty where three or more coronary arteries have been operated upon during a single surgical procedure.</p>	<p>Macquarie Active pays out a severity A (100%) benefit for severe peripheral vascular disease<sup>9</sup> resulting in amputation of either a limb, hand or foot and a severity C (40%) benefit for severe peripheral vascular disease with gangrene and severe vascular ulceration.</p> <p>Macquarie Active pays out severity E (5%) benefits for surgical procedures such as endovascular or open carotid artery stenosis repair.</p> <p>There is no specific mention of triple vessel angioplasty although this would be implicitly covered above.</p>
Heart - valve and aorta surgery	<p>A typical premier trauma cover pays out full benefits for heart valve and aorta surgery.</p>	<p>Macquarie Active pays out severity C (40%) benefits for open aortic graft surgery and heart valve replacement or repair.</p> <p>Macquarie Active pays out severity E (5%) benefits for endovascular heart valve repair or replacement and endovascular repair of an aortic aneurysm.</p> <p>Full benefit would be paid under Macquarie Active for the progressive deterioration of condition after the surgery.</p>

<sup>9</sup> Severe arterial insufficiency.



Trauma type conditions	Typical trauma premier cover	Macquarie Active
Stroke	A typical premier trauma product pays out full benefits for a stroke.	<p>Macquarie Active pays out benefits for stroke in the following manner:</p> <ul style="list-style-type: none"> <li>▪ A (100%) for any stroke causing permanent and irreversible inability to perform 4 out of 6 activities of daily living</li> <li>▪ B (65%) for any stroke causing permanent and irreversible inability to perform 3 out of 6 activities of daily living</li> <li>▪ C (40%) for any stroke causing permanent and irreversible inability to perform 2 out of 6 activities of daily living</li> <li>▪ E (5%) for stroke.</li> </ul>
Kidney failure	A typical premier trauma product pays out full benefits for chronic kidney failure.	<p>Macquarie Active pays out benefits for kidney failure in the following manner:</p> <ul style="list-style-type: none"> <li>▪ A (100%) for chronic renal failure AND the insured person is permanently excluded from access to renal transplantation</li> <li>▪ B (65%) for chronic renal failure</li> <li>▪ E (5%) for acute renal failure</li> </ul>
Paralysis	<p>A typical premier trauma product pays out full benefits for paralysis, with some insurers breaking it down to the following categories:</p> <ul style="list-style-type: none"> <li>▪ diplegia</li> <li>▪ hemiplegia</li> <li>▪ paraplegia</li> <li>▪ quadriplegia</li> <li>▪ tetraplegia.</li> </ul>	<p>Macquarie Active pays out benefits for paralysis in the following manner:</p> <ul style="list-style-type: none"> <li>▪ A (100%) for quadriplegia</li> <li>▪ B (65%) for paraplegia.</li> <li>▪ A (100%) benefit for any chronic neurological disease causing permanent and irreversible inability to perform 4 out of 6 activities of daily living with no restriction on the type of paralysis.</li> </ul>

Trauma type conditions	Typical trauma premier cover	Macquarie Active
Survival period	A typical premier trauma product requires the insured to survive for 14 days from the date of the diagnosis of the trauma conditions or the date of the medical procedure.	Macquarie Active does not impose a specific survival period.
General exclusions	A typical premier trauma product excludes the following events: <ul style="list-style-type: none"> <li>▪ if it is caused directly or indirectly by an intentional self-inflicted act</li> <li>▪ if the trauma condition has a specified exclusion.</li> </ul>	Macquarie Active excludes the following events: <ul style="list-style-type: none"> <li>▪ if the Health Event is caused directly or indirectly by an intentional self-inflicted act at any time</li> <li>▪ if the Health Event has a specified exclusion.</li> </ul>

**Table 4. Comparison of key total and permanent disability type benefits**

TPD type conditions	Typical TPD cover	Macquarie Active
TPD definition	<p>A typical TPD definition includes the following:</p> <ul style="list-style-type: none"> <li>▪ An any occupation definition where the life insured is unlikely ever to be able to engage in any occupation for which they are reasonably suited by education, training or experience.</li> <li>▪ An own occupation definition where the life insured is unlikely ever to be able to engage in his/her own occupation.</li> <li>▪ A loss of limbs definition where the life insured suffers the total and permanent loss of the combinatorial uses of the limbs and the sights.</li> <li>▪ A whole person impairment definition where the life insured suffers a permanent impairment of at least 25% of whole person function defined by approved medical measures.</li> <li>▪ A loss of independent existence definition.</li> <li>▪ significant cognitive impairment</li> </ul>	<p>The Macquarie <i>occupational impairment</i> definition only applies if no other condition is payable. It is broadly equivalent to the typical product. The own occupation definition is displayed below:</p> <p>a) if the <i>own occupation</i> definition applies, due to injury or <i>illness</i>:</p> <ul style="list-style-type: none"> <li>▪ the insured person has been absent from their <i>own occupation</i> for a continuous period of at least three months, and in our opinion, is incapacitated to the extent that they are unlikely ever again to be able to engage in their <i>own occupation</i></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>▪ the insured person has suffered irreversible <i>whole person impairment</i> of at least 25% which shows no further chance of improvement, and in our opinion, is incapacitated to the extent that they are unlikely ever again to be able to engage in their <i>own occupation</i>.</li> </ul>
Musculoskeletal	Musculoskeletal conditions are covered under the typical TPD cover definition above.	<p>Macquarie Active pays out benefit under musculoskeletal system in the following manner:</p> <ul style="list-style-type: none"> <li>▪ a (100%) if loss of musculoskeletal function results in the permanent inability to: <ul style="list-style-type: none"> <li>– earn an income in any occupation with income which provides at least 75% of the insured pre-disability income <sup>10</sup>, or</li> <li>– perform two or more occupational core duties (of their own occupation) if the duties require the specific musculoskeletal functions</li> <li>– permanent and irreversible whole person impairment of at least 60%.</li> </ul> </li> </ul>

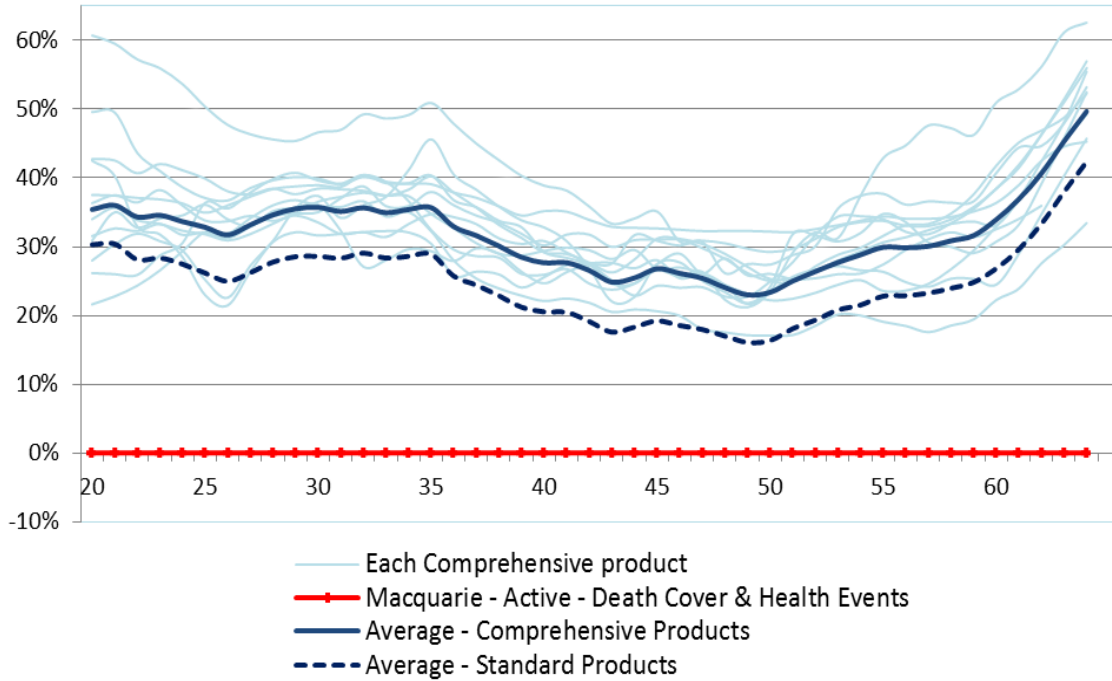
<sup>10</sup> Income in the most recent 12 month period in which they were gainfully employed.

TPD type conditions	Typical TPD cover	Macquarie Active
		<ul style="list-style-type: none"> <li>▪ B (65%) for:               <ul style="list-style-type: none"> <li>– permanent and irreversible loss of the use of two limbs.</li> </ul> </li> <li>▪ C (40%) for permanent and irreversible whole person impairment of at least 40%.</li> <li>▪ D (20%) benefit for permanent and irreversible whole person impairment of at least 25% or loss of the use of one upper limb.</li> </ul>
Mental illness/stress	<p>A typical TPD definition is set out above. It includes a cognitive loss definition that would typically be defined as:</p> <p>Significant cognitive impairment means a permanent deterioration of cognitive functioning as observed clinically and confirmed by standardised testing, that requires you to be under continuous supervision and care by another person.</p>	<p>Macquarie Active pays out severity A (100%) benefit for:</p> <ul style="list-style-type: none"> <li>▪ a stroke causing permanent and irreversible inability to perform 4 out of 6 activities of daily living</li> <li>▪ a psychiatric condition resulting permanent and irreversible inability to perform 4 out 6 activities of daily living or total lack of social interaction</li> <li>▪ permanently placed under public guardianship by the Guardianship Board due to concern for their own safety or safety of others</li> <li>▪ total lack of social interaction</li> <li>▪ severe cognitive impairment.</li> </ul> <p>Macquarie Active pays out a severity B (65%) benefit for moderate cognitive impairment or any chronic neurological disease causing permanent and irreversible inability to perform 3 out of 6 activities of daily living. It also pays out a severity D (20%) benefit for mild cognitive impairment or a psychiatric condition.</p>
Cancer	<p>A typical TPD definition focuses on the occupational impact of the total and permanent disability caused by trauma conditions such as cancer. Therefore, it does not specifically mention such conditions.</p>	<p>Macquarie Active pays out benefits for cancer depending on the severity of the outcome of such conditions. The cancer feature is a blended feature of TPD and trauma events.</p>
Other body systems	<p>A typical TPD definition focuses on the occupational impact of the total and permanent disability caused by trauma conditions in other body systems. Therefore, it does not specifically mention such conditions.</p>	<p>Macquarie Active pays benefits for other body systems depending on the severity of the outcome of the condition. This benefit is paid under the Health Events cover which, in effect, blends the conventional TPD and trauma definitions together.</p> <p>Macquarie Active pays benefits even if the insured is still able to work, provided the qualifying conditions are met.</p>

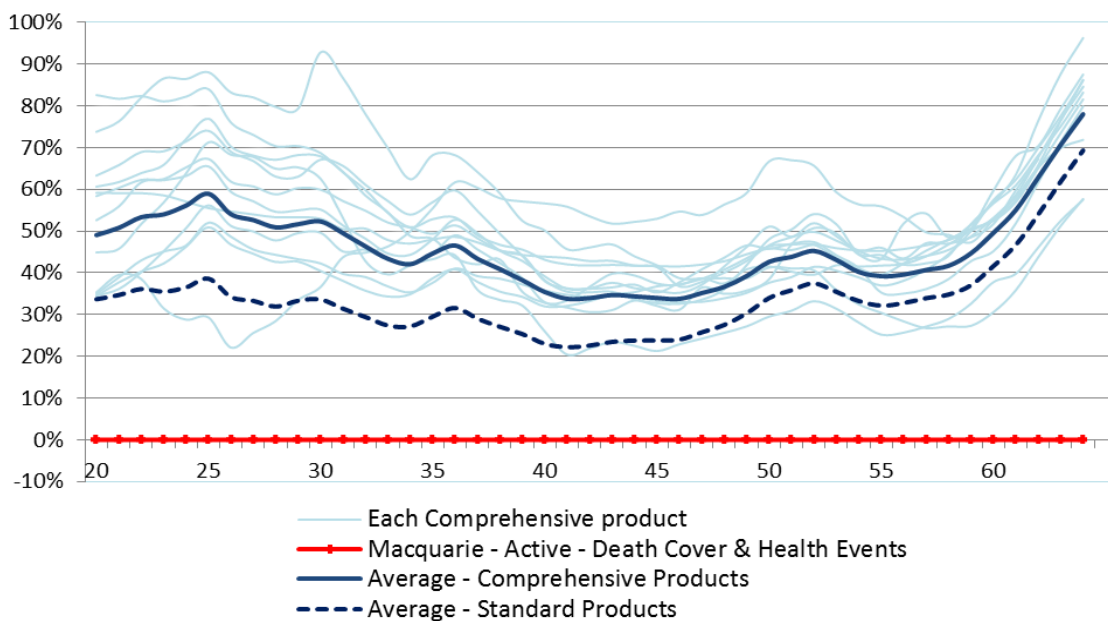
TPD type conditions	Typical TPD cover	Macquarie Active					
Activities of daily living	<p>A typical TPD definition includes an activities of daily living definition where the full sum insured is paid if the life insured is unable to perform two or more of the following activities of daily livings:</p> <ul style="list-style-type: none"> <li>▪ washing</li> <li>▪ dressing</li> <li>▪ feeding</li> <li>▪ maintaining personal hygiene</li> <li>▪ getting in and out of bed (moving from place to place).</li> </ul>	<p>Macquarie Active pays out benefits in the following manner:</p> <ul style="list-style-type: none"> <li>▪ A (100%) for the presence of a medically recognised disease or disorder resulting in permanent and irreversible inability to perform 4 out of 6 activities of daily living</li> <li>▪ B (65%) for the presence of a medically recognised disease or disorder resulting in permanent and irreversible inability to perform 3 out of 6 activities of daily living and</li> <li>▪ C (40%) for the presence of a medically recognised disease or disorder resulting in permanent and irreversible inability to perform 2 out of 6 activities of daily living.</li> </ul> <p>Macquarie Active has a much more comprehensive list of activities under the activities of daily living definition. There are six main categories, each containing a list of specific tasks as shown in the following table. The ADL categories, specific tasks and required scores are all taken into account when determining the level of benefit payout.</p>					
		<b>Self-care</b>	<b>Communication</b>	<b>Physical activities</b>	<b>Sensory function</b>	<b>Hand functions</b>	<b>Advanced functions</b>
		bathing mobility etc.	speaking keyboard use etc.	intrinsic – sitting, squadding etc.  functional – carrying, exercising etc.	hearing smelling etc.	grasping pinching etc.	travel sexual function etc.
Home Duties	A typical TPD definition includes a home duties definition under which a full benefit is paid if the life insured is unlikely ever to be able to perform domestic work.	Macquarie Active offers a domestic duties definition through the occupational impairment condition. This is consistent to other companies in the market. However, this is only payable if no other condition is payable (even if the other condition pays a smaller benefit).					

## Appendix B Price comparisons

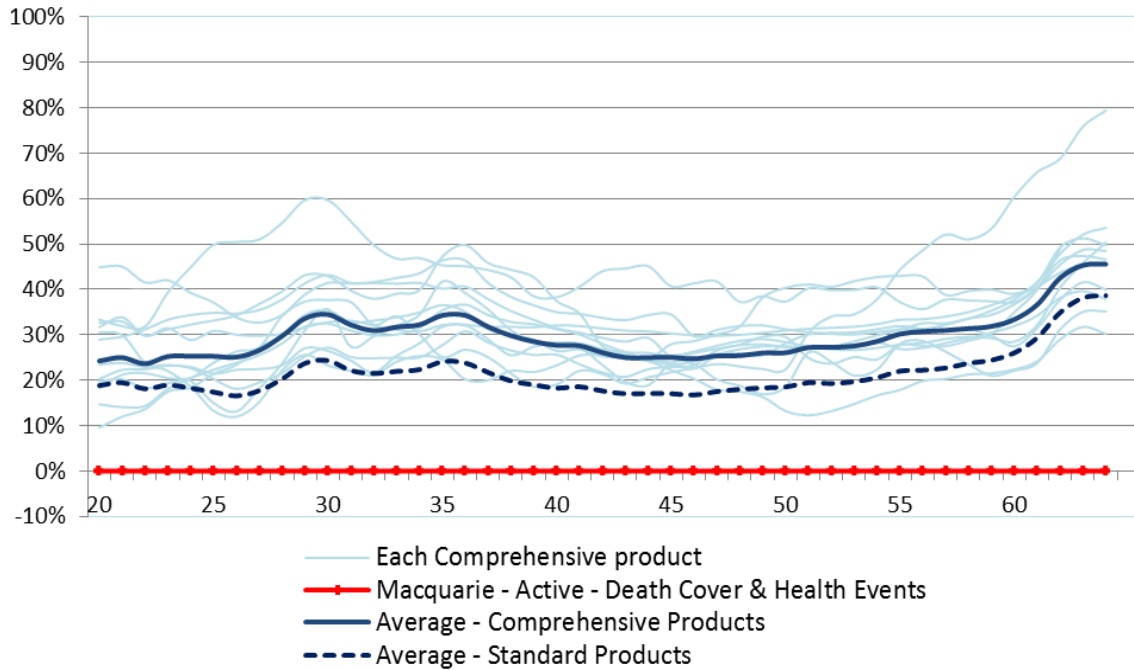
**Graph 1. Term, trauma and TPD premiums relative to Macquarie Active  
Male, non-smoker - \$500,000 sum insured, own occupation, GFI, accountant qualified**



**Graph 2. Term, trauma and TPD premiums relative to Macquarie Active  
Female, non-smoker, \$500,000 sum insured, own occupation, GFI, accountant qualified**



**Graph 3. Term, trauma and TPD premiums relative to Macquarie Active**  
**Male, smoker, \$500,000 sum insured, own occupation, GFI, accountant qualified**



**Graph 4. Term, trauma and TPD premiums relative to Macquarie Active**  
**Female, smoker, \$500,000 sum insured, own occupation, GFI, accountant qualified**

