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Trauma Insurance

Want to play the lottery?

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ABSTRACT

The vast majority of claims under a trauma risk protection policy satisfy the relevant definition and are paid without any element of doubt or uncertainty. There are some instances, however, where a degree of uncertainty exists and where unexpected outcomes are achieved. With over 60 different events now covered, it can sometimes feel like playing the lottery when a trauma insurance policy is bought. In fact, some advisors are believed to market it as a "retirement plan" in the event of contracting a seemingly benign traumatic condition! This begs the question: has trauma insurance kept pace with innovation in medicine, technology and the needs of the policyholder? Is it at risk of being mis-sold and could it potentially jeopardise the profitability of insurers and ultimately affect policyholders' premiums? Essentially, this brings the whole essence of "best advice" into question.

This paper will highlight recent research into the possible effects of the rapid expansion of trauma definitions, consider alternative product designs, international trends in trauma product development and what the "ideal" trauma product design could look like, considering the roles and needs of the major stakeholders.

Keywords: trauma insurance; product development; customer expectations; sustainability; treating customers fairly; professionalism.

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1. Introduction and Background

In 2012 the Australian market saw one of the most discussed and debated changes to a core trauma definition for many a year. After remaining largely unchanged for over a decade, a number of insurers amended their claims definition for heart attack to align more closely with how clinical specialists define a myocardial infarction, better known as a heart attack. Such a fundamental shift is rare. Trauma product upgrades usually involve little more than a tweak of definitions here and a small 'nil cost' addition there. Such changes are ostensibly to maintain an edge over competitors when measured by research houses (companies that provide comparator tools to advisors, playing a pivotal role in the advice and sales process for trauma and other financial products). Some changes are justified to keep pace with modern medicine, but are all changes really in the best interest of consumers, advisers, insurers and reinsurers, or the industry as a whole?

This paper considers what trauma insurance is, what its original intent was, how it has evolved and why product development in this area should consider long-term sustainable outcomes.

First, let's take a step back. What is trauma insurance? Being the relatively new kid on the block in terms of risk protection insurance, after 30 years trauma insurance is becoming increasingly popular as a means of wealth protection. However, sales penetration rates remain low at 8%[i] relative to its older life and disability cousins, which are often offered as part of Australians' superannuation default group risk benefits. Like life insurance and total and permanent disability (TPD) cover, trauma insurance is payable as a lump sum benefit. However, it is paid on medically diagnosed events rather than disablement as is the case with TPD insurance, or death in the instance of life insurance. Trauma insurance was designed primarily to assist in covering the medical costs of a significant medical event and to provide a level of capital to cover lost income. Developed in 1983 in South Africa by Dr Marius Barnard as dread disease insurance, the cover has been accepted into many insurance markets around the world and is being regarded by Dr Barnard as the "protection policy of the new millennium". Other names for this cover include trauma insurance, serious or critical illness insurance and living assurance.

So how has this product changed over time and how does this latest change work?

Events covered by the policy have increased from 4 conditions in the original version to more than 60 today, with products often including a combination of multi-pay, severity based and / or partially payment[ii] conditions. The typical offering today has become such a complex product and the policy disclosure statement (PDS) so long that the running joke is that it won't fit into a standard letterbox (for those who still choose to receive things by snail mail). Trauma insurance has become expensive and claims costs have soared as a result of increasing incidence rates. Some may argue this is as a result of the proliferation of trauma product definitions and improvements in medical technology. Barnard (2007) argues that this is as much to do with the dramatic changes to society as smoking, alcohol abuse, stress, lack of exercise and obesity take effect. With further "relaxing" of the product definitions, claims costs can only be expected to increase and Singam (2012) questions the sustainability and affordability of trauma insurance in its current form.

For example, for a comprehensive trauma insurance product, where heart attack forms approximately 20% of the claims experience for male lives, a 65% increase in

heart attack claims, as estimated by Singam in her research, can translate into as much as a 15% increase in total trauma claim costs for males.

The authors of this paper therefore postulate and will test the following arguments:

- trauma insurance products have become too complex;
- trauma insurance products are expensive;
- trauma insurance are not adequately meeting the needs of customers;
- trauma insurance product development hasn't kept up with medical advances; and
- whilst on its current path, this product may anticipate volatile premium fluctuations.

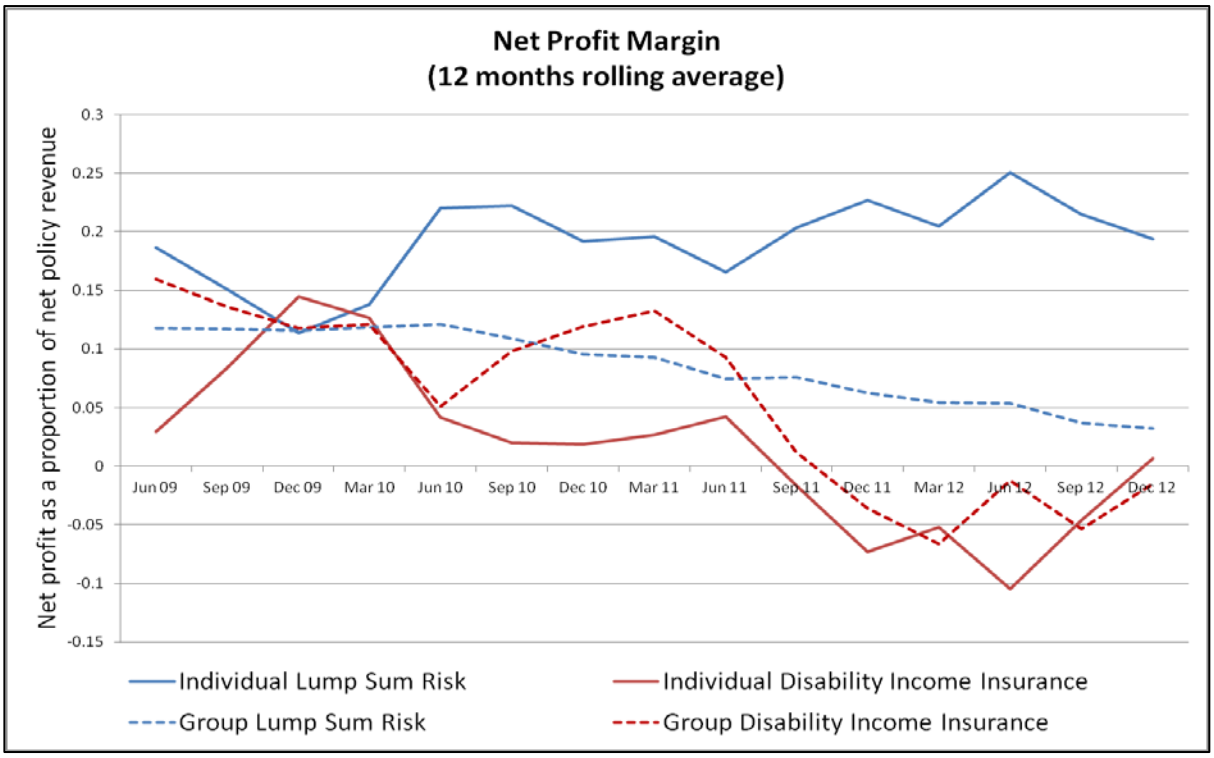
2. 2012: A Mid-life Crisis?

In his Credit Suisse research report of 7 November 2012 with the same title, Heagerty (2012) that listed insurers saw a significant decline in profit margins, some reporting margins at less than 50% of those reported two years earlier. Lapse and experience losses continued with lapse rates being particularly worrying, at 16% almost 30% higher than four years prior. Earnings are under pressure at a time when the Australian Prudential Regulation Authority's (APRA) new Life And General Insurance Capital (LAGIC) framework will put further pressures on returns on equity. Overall, their research highlighted additional "downside risk" to an industry that had just witnessed one of its worst years in income protection and group salary continuance losses in 2011.

APRA also continues to alert the life insurance market of its concern over worsening profitability, with Ian Laughlin, as a member of APRA, again highlighting the dangers of how quickly things can go wrong. At the Financial Services Council Life Seminar in 2013, Laughlin showcased net profit margins deteriorating for group lump sum, individual and group disability income insurance (Figure 1). Individual lump sum risk margins, of which trauma experience will be a part of, continue to hold up for now.

Income protection (IP) business is more exposed to economic conditions than trauma insurance and IP business takes longer to recognise losses due to its longer tail as a result of terminations. However, some common themes exist between these product lines. Several parallels exist between what was witnessed and reported by Bui & Dreyer (2012) on the income protection shock of 2011 and what may yet come from a continuing relaxing of trauma product definitions. Some deterioration in trauma experience is evident from the Financial Services Council/KPMG 2008-2010 Lump Sum Experience Investigation Report (FSC Experience Report) and may suggest that we could be witnessing the after effects of getting it wrong. Over the most recent investigation period (2008 – 2010), male non-smoker experience has deteriorated 2.4% p.a. and female non-smoker trauma experience by 2.2% p.a. since the 2004 – 2006 investigation[iii].

Figure 1: Net Profit Margin for the Life Insurance Industry[iv]



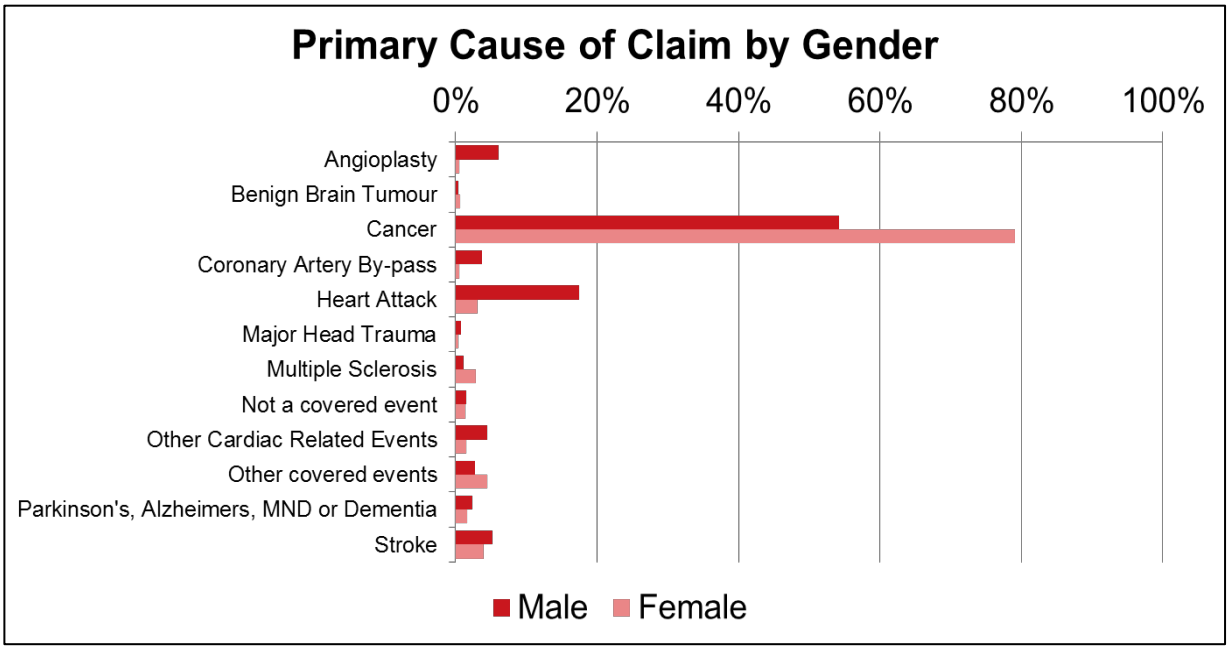
This is certainly no runaway train yet, but akin to what happened to income protection product development in the late '80's and continuing into the '90's, the following questions ought to be asked of the ongoing tweaking of trauma product definitions:

- Did the pricing actuaries get their assumptions right or were they overly optimistic when new / more lenient definitions were introduced?
- Did the product managers and the other contributing stakeholders draft a sufficiently tight definition?
- Did the underwriters diligently assess risks in accordance with the guidelines, philosophy and pricing assumptions?
- Was there appropriate disclosure by the applicant or an element of anti-selection?
- Have changes in diagnostic techniques, clinical definitions and treatment, outpaced our existing wordings?
- Did the claims team appropriately investigate and adjudicate the claim?
- Is the claim data sufficiently reliable or granular enough to draw meaningful conclusions about experience?

Ever since the product was first developed, the majority of claims have been for heart attack, stroke and cancer. This is also underlying the pricing basis for these products. This is common for all countries where statistics are provided. What is of great concern in Australia is the increasing proportion of cancer claims, particularly for females. In Australia, according to the FSC Experience Report, more than 50% of claims for males and almost 80% for females are as a result of malignant cancer. This is also observed in RGA Reinsurance Company of Australia's (RGA) own internal experience investigation in 2012, as can be seen in Figure 2. Earlier diagnosis due to better equipment and techniques could be partially responsible for this increase, but

Barnard (2004) contends that non-disclosure has also been implicated and the FSC Experience Report supports this hypothesis, indicating the possibility of anti-selection at early policy life duration.

Figure 2: Primary Cause of Claim by Gender[v]



"It is obvious that (trauma) insurance was launched (30) years ago due to a financial need after diagnosis and treatment of critical illness. Since then there has been an even greater improvement in diagnostic methods and treatment. Conditions that were severe then are no longer life threatening", Dr Barnard concludes. During these 30 years the new kid on the protection block has grown up, became a volatile teenager and is already showing signs of having a mid-life crisis. Dr Barnard contends, though, that trauma insurance products have evolved and will continue to evolve to tackle these challenges.

3. What Women Want

Borrowing from the title of the 2000 American romantic comedy film, starring Mel Gibson and Helen Hunt, the real question is "what consumers want" from trauma insurance?

The relatively high premiums associated with trauma insurance combined with a stepped (age rated) premium structure may well explain the low sales rates of trauma insurance, with only 8% of Australians having trauma cover when 7 in 10 Australians know someone who has suffered a traumatic event[vi]. Overlay the high cost of living in Australia and even where policies are sold, affordability becomes a major driver of policy lapsation.

Pauline Blight-Johnston proposed some thoughts on what customers want during the Financial Services Forum in Melbourne, 2012. Life insurers ought to offer:

- Certainty
- A fair outcome
- Trust
- Peace of mind

Matching these to clients' simple needs of worrying about dying too soon (or arguably suffering from a dreaded disease), outliving their finances or an inability to earn money, should be simple enough.

Blight-Johnston concludes: "So why do we make it so hard?" How do insurers end up with complex product descriptions and PDS's that don't fit into a letterbox?

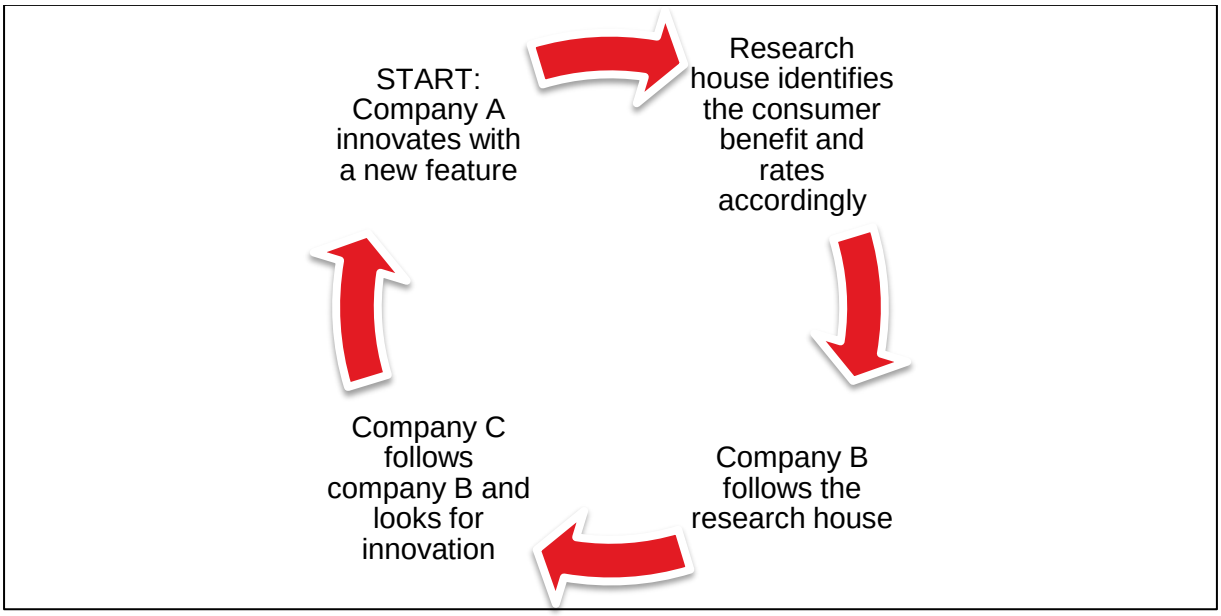
Tightening regulation on advice[vii], and the 'know your client' rule in particular, means that an adviser has to recommend the product that is most suitable for the client. For example, an adviser needs to be able to explain to a client how a heart attack definition with an A rating compares to one with a B rating (where A is regarded better than B). Research houses present this explanation in a straightforward and accessible way that allows an adviser to easily explain the differences. However, the pure focus on product features arguably ignores two very important factors that surely make up a core element of "knowing your client" and "best advice":

- client circumstances in terms of what they can afford and wish to achieve, and
- sustainability of the recommendation.

Consequently, many companies strive for an A rating to ensure that the adviser has no reason to choose another company over theirs. Having the highest rating is also a retention play as there is less of a reason for an adviser to move the business elsewhere. The trick is, how does a life insurer get an A rating, and retain that rating?

Figure 3 demonstrates the "product competition spiral" according to Moffitt (2008) that describes product development in Australia today for intermediated business.

Figure 3: The Product Cycle



One company may be introducing a new feature to the market. This may lead to a period of differentiation, but as soon as research houses factor this into the relative rating of products, others will follow to ensure that their products "compare". Do followers fully appreciate the risks that they assume by following? Are we pricing it correctly? Is the process sustainable? And has anyone considered whether the client wants the added features or whether it is actually in their best interest given the extra (potentially volatile) costs, now and into the future?

4. Jaguars or Jalopies?

"I could feel by the soft cushions that it was a very good class of motor car. And then, also, the motor car didn't make a noise. I already knew that you could tell it was a good motor car if the engine was silent...

"Another thing I noticed was there seemed to be lots of cattle on the road. I saw, a good number of times, through the mist when it lifted slightly at intervals, a pair of horns or the back part of an ox... It was only afterwards, when it got properly daylight, that I could see through the mist what it was that was making the motor car move, and I felt pretty disappointed, then, I can tell you... it was after all a motor car I had been riding in, and for years to come I would be able to talk about it, telling people about how I once went to Ramoutsa in a motor car. And there would be no need for me to say that it was... being pulled by a team of oxen"

Herman Charles Bosman[viii]

Disillusionment and disappointment often arise when there is a gap between expectations and reality, McDougall (2011) contends. Contemplating the issues facing universal life insurance products at the time, promises made and interests of various stakeholders, McDougall pondered the role of actuaries in managing risk and outcomes. In particular, the author considered not so much their technical competence and responsibilities, but rather actuaries' professional and ethical responsibilities towards the customer.

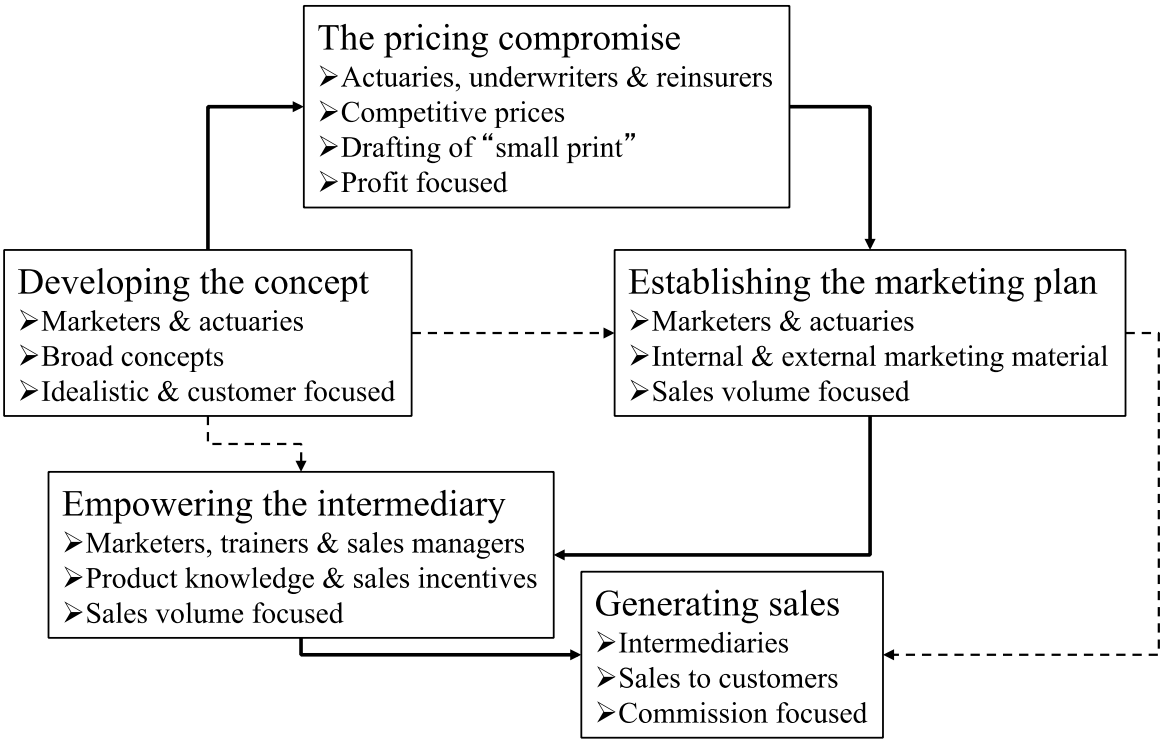
McDougall rightfully asks: "Are we marketing Jaguars but selling jalopies?"

Today we can ask the same question of trauma insurance. The focus ought to be on matching client needs with affordable and easy to understand solutions, yet we created an expensive and complex product described to the customer in PDS documents that won't fit into a letterbox. In fact, one could go further and argue that a select few, who are gaming the lottery, would be driving away with the Jaguar whilst the bulk of policyholders (and possibly those genuinely in need) are left to make do with their ox-powered jalopies or no cover at all.

Figure 4 shows McDougall's take on the product development cycle: from the initial inception process, where the idea is born, through to the ultimate point of selling the product to the end customer. What may have started out as an idealistic, customer-focused idea invariably ends up as a commission-driven hard sell after a complex, cumbersome development process that is overloaded with "small print". Is the product still delivering what it originally intended on doing, or has it become an intellectual challenge to see how we can optimise profitability for shareholders

with little acknowledgment of what would form the basis for a sustainable value proposition for both customers and shareholders alike?

Figure 4: Developing the Knowledge: Are customer purchases and expectations aligned?[ix]



The dotted lines reflect the alternative view, cutting through and simplifying the process to ensure the product concept remains intact, being customer focused and delivering on the needs it was always intended to meet.

McDougall contends "the health of the industry is dependent on the alignment of customer expectations with the benefits provided". In fact, that is what will ensure that customers are treated fairly. Like South Africa, Australia is still a market where the industry and actuarial profession have significant scope for self-regulation. However, as is seen in the UK and elsewhere with regulations around Treating Customers Fairly (TCF), and with increased regulation around the Future of Financial Advice (FOFA) in Australia, it is imperative that our industry considers our duty towards its reason for being: the customer.

"Actuaries, as both the technical experts and the holders of the bulk of the intellectual capital, are best positioned to influence the conduct of the industry and narrow the gap between customer expectations and benefits offered. However, given the extreme price competitiveness of the industry and the lengthy lag interval between product sales and either the consumption of benefits or the collapse of policies, short-term targets are best met by applying our skills to effectively broaden this gap. The short-term interest of each company is, therefore, diametrically opposed to ensuring the long-term survival of a relatively regulation-free life assurance industry and a respected actuarial profession", McDougall concludes. The authors of this paper couldn't have said it better.

5. Opportunity

RGA conducted an internal study into trauma products in 2012 that aimed to:

- identify inconsistencies and anomalies, gaps and overlaps, weaknesses and potential risks in some of the trauma definitions in Australia trauma products;
- inform industry thinking when conducting product reviews;
- reduce the potential for a poor customer experience; and
- help ensure the profitability and sustainability of the product itself.

By way of referencing some of the key findings from this research[x], the authors believe product development should be reassessed in light of finding long-term sustainable solutions that will meet customers' needs. The jury is out on what designs will survive; however, money talks and ultimately sustainability will be driven by improved risk controls, matching clients' needs, affordability and long-term profitability.

5.1 How the "Big 4" conditions have changed

5.1.1 Heart Attack

It is of interest to look at just how much trauma insurance definitions have changed over the years. We took the "big four" that we know make up the bulk of all claims paid[xi] and compared today's policy wording to wording from 1996. Given all the changes that have occurred with this definition in the last year, it's worth starting with the heart attack definition.

The 1996 definition for a valid heart attack claim assessment required both elevated blood biomarkers and electrocardiogram (ECG) changes be present for at least three days. If you had only one of these symptoms, no heart attack was deemed to have happened. The *current* definition requires that you can have either of these symptoms. In addition, cardiac enzyme levels are now considered valid for such purposes at much lower levels than before.

By introducing the word "or" rather than "and" in the definition, removing the period of time that symptoms had to exist and reducing the sensitivity requirements, insurers have made it much easier to claim for a heart attack (or on a heart attack definition – these may not mean the same thing). This may result in trauma insurance claims under the definition of "heart attack" whilst no real pain or suffering occurred. Indeed, some may argue that no real heart attack had happened at all.

Work done by RGA suggests that one of these changes alone is expected to result in a 40% increase in claims costs and by completely moving from the 1996 definition to the definitions that are used today, almost 60% (also confirmed by Singam (2012)). In a market where there is fierce competition this presents a real problem for insurers who wish to minimise rate increases and sustain profitability. For customers, where affordability has already been mentioned as an issue, this is expected to further impact negatively on trauma insurance take-up and lapsation rates.

5.1.2 Coronary Artery By-pass Grafting (CABG)

When considering coronary artery by-pass grafting, it is a similar story. A person no longer has to undergo open-heart surgery and less invasive techniques are acceptable in order to qualify for a payout under a trauma insurance policy. The full benefit is also payable for a single vessel procedure, where a minimum of two vessels was required in earlier definitions.

Most patients return home within four to six days after such a procedure. Although the underlying risk still exists, perhaps this form of intervention does not classify as a catastrophic event as originally envisaged.

5.1.3 Cancer

Based on the RGA research presented earlier (Figure 2), and there is no reason to believe this would not be representative of the Australian market, cancer is the leading cause of trauma claims, accounting for approximately three times as many claims as the next event, heart attack. Many changes have been made to the cancer definition over the years, partly because we now cover a wider range of cancers. One of the cancers introduced by the industry is Chronic Lymphocytic Leukemia, which has a high incidence rate in the over 60's (and is therefore highly likely to result in a policy payout), with a much less severe impact than other cancers.

Insurers have also lowered the threshold of severity for skin cancers and prostate cancers and have introduced a wide range of partial payments for these less severe cancers. For prostate cancer, T1a and T1b prostate cancers are now covered if the Gleason score exceeds 5 or if major interventionist therapy is given, with a partial insurance payment made for these diagnoses. In some instances, though, a larger if not full insurance payment will be made. Again, the sustainability of such a payment is questionable and inconsistent with other cancers with similar severity. Another example would be thyroid cancer, which is easily treated, yet attracts the same payment as pancreatic cancer – one of the worst types of cancer.

Cancer is a prime example of how ad hoc product development in this way, driven mostly by an eagerness to obtain a better research house rating than competitors, has resulted in a product with many inconsistencies in the severity of conditions that are paid the same benefit amount.

It has also become one of the most complex and confusing definitions. A typical definition will specify four or five cancers that are *included*, a similar or greater number that are *excluded* and within those exclusions, a number of *exceptions*. A complex definition to price, sell and understand all round.

5.1.4 Stroke

The stroke definition has undergone some really big changes. Critically, the clinical diagnosis of stroke has gone from being "symptom based" to "tissue based" and advances in technology have made it easier to identify tissue abnormalities, even very minor areas of infarction. Insurance definitions now refer to damage rather than deficit, thereby moving away from a definition that relates to some kind of physical or mental impairment. Furthermore, the need for this "damage" to be permanent has been removed and many definitions no longer refer to symptoms lasting at least 24 hours. With most definitions it is now possible to have no long-term,

or indeed any, impairment at all; provided that the imaging shows some kind of damage, you will receive a payout. Modern diagnostic tools easily pick up new instances of "strokes" that technically meet the insured definition, although no deficit in ability has occurred and the customer may not even be aware that they have suffered a "stroke".

It is arguable that most people over the age of 55 will have some degree of "damage" to their brain from tiny bleeds that have happened over the years, with no impact on them whatsoever.

The end result of all these changes is that we now have a product that is so generously worded that it can be likened to a lottery. Buy the product with almost an anticipation that you will claim, hoping that it is for of a minor incident rather than a major condition. And you know what? It might just be the day your horse comes in.

5.2 Medical advancements

With the current pace of technological advancement, consumers are able to access and gain more insight into their current and long-term health than ever before. In the USA a DNA test can be purchased for as little as US$300. These tests allow a person to check whether they may be a carrier of certain illnesses and what the likelihood would be of developing that illness.

People can also buy D.I.Y. tests for HIV that they can use in the privacy of their own home. This testing is totally anonymous; no one records the fact that the person purchased the test and they are not required to report a positive diagnosis. The opportunity for anti-selection against an insurer is massive if HIV self-testing can be done almost as easy as a pregnancy test.

Another interesting development is the ability to use a digital recording to identify whether a person has early signs of Parkinson's. One of the symptoms of Parkinson's disease is rigidity and tremor, which affects not only the muscles but also the vocal chords. A person can call a hotline and voice recognition software will be able to tell whether the caller has Parkinson's and how far it has progressed. Akin to HIV self-testing, access to medical diagnosis of a condition as serious as this could pose lethal for a product that hadn't been designed with this in mind.

Clearly, one should encourage the early diagnoses of serious illnesses, but this type of medical and scientific advancement should be taken into account when considering trauma insurance product design. In fact, considering the comparison of trauma insurance with a lottery again, what happens when one removes the element of chance and replaces it with the high probability that these tests can provide? It only gets worse: a one-way bet.

5.3 Claims management, case law and FOS determinations

Finally, assuming that customers understand the products they buy, where have current practices left the life insured when it comes to claims stage?

Insurers are finding it difficult when it comes to assessing the claim. Current medical terminology used doesn't always align with the wording in policy contracts, although the latest changes to the heart attack definition have brought greater consistency between the two. Generally, the policy wording is the determinant for whether or not a claim can be paid, but it doesn't always go this way and can leave both the insurer and the policyholder in a difficult position.

A search of the Australian Legal Information Institute (AUSTLII) case law database found two decisions relating to the interpretation of trauma insurance definitions[xii, xiii]. Both were in relation to the heart attack definition and both were settled on appeal in favour of the insurer. The gist of each case was, while the insured may well have suffered a heart attack from a clinical medicine perspective, the evidence necessary to satisfy the insurance definition was either not submitted or unavailable. These cases provide vindication that claims are to be adjudicated on the basis of the contractual definition, not on the applicable clinical medicine definition.

A search of the Financial Ombudsman Service (FOS) website identified 21 determinations relating to the denial of trauma claims. Only one of these was directly relevant to RGA's review, a complaint lodged in 2004 following the denial of a "stroke" claim[xiv]. The insured suffered ongoing headaches and cognitive deficits after a subarachnoid haemorrhage, however, these were expected to resolve and an MRI scan was normal. The insurer rejected the claim on the basis that there was no permanent neurological deficit and the panel found in favour of the insurer. If that same claim were made today, a different outcome is possible.

Arguably, customers will struggle to understand such decisions.

5.4 So what?

In concluding this section, it is worth summarizing:

- the industry has witnessed significant changes and arguably a weakening to claims definitions;
- medical advances are rapidly impacting these products, introducing the ability to self-diagnose and possibly anti-select;
- insurers are finding it difficult when it comes to assessing a claim; and
- where claims definitions have been challenged, rulings have often been in favour of the insurer (against customer expectations).

In the view of the authors, an opportunity exists for product developers to tighten definitions, align them better to customer expectations and medical testing without applying undue pressure to pricing.

6. Recent Australian Product Development

In Australia, Macquarie Life launched a severity based trauma product with the claim that it better aligns with needs and expectations of customers. This type of product has been tried and tested around the world with most notable success in South Africa. In Australia, true severity based products have not developed as elsewhere and after three years it remains only Macquarie offering this product in its

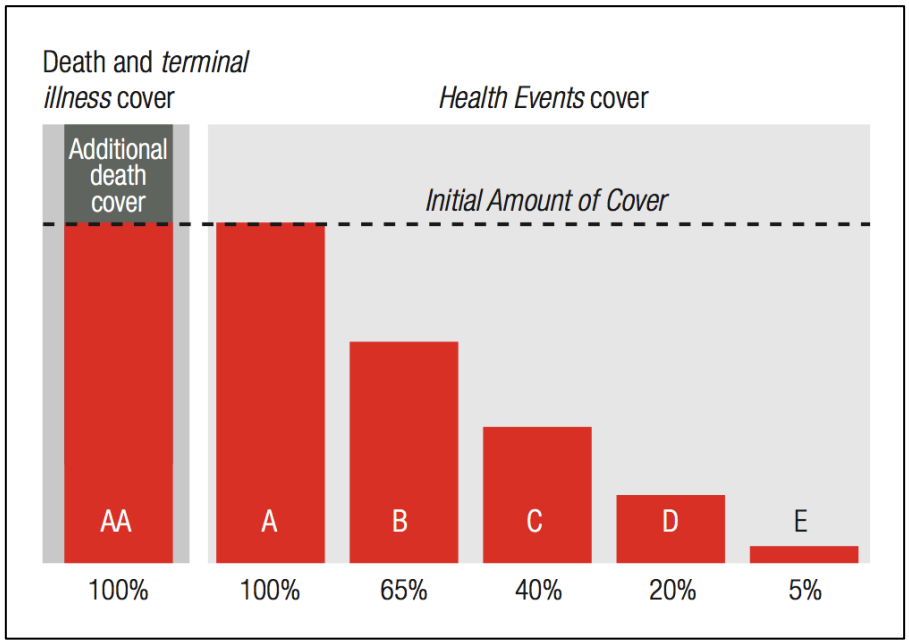
full severity based form. Notably, it has no comparable competition and ought to be unaffected by the research house-effect as it is the only product of its type (even though research houses will attempt to compare it to what they may deem a benchmark product).

It's offering can be summarized as:

- Broader and more affordable cover available
- Lower thresholds for many conditions in order to qualify for payment
- Payment based on severity of the event
- Multiple claims allowed over lifetime of policy[xv]

It is different from traditional trauma insurance in that it pays on several stages of severity, as opposed to partial and/or full benefits. Figure 6 demonstrates how it works.

Figure 6: Health Events cover with Macquarie Life Active



Trauma insurance is the only risk insurance product driven by cause and not effect. Consider life cover, for instance. One is generally not concerned with the cause of the death, simply that the person is actually dead. The same is true of TPD cover (that they are permanently disabled – again, not the cause). Trauma insurance is all about the diagnosis and as the product evolves, severity based trauma addresses this issue further as it assesses a claim against how severe the condition is, rather than the nature of the condition itself.

It covers more conditions than a traditional product because it starts from a much lower threshold and because it is not as reliant on the initial cause of claim. For example, a debilitating mental illness would not usually be paid under a regular trauma product but could be paid under severity based trauma insurance if there is a resulting physical or mental impairment. Similarly, it can also pay for conditions that are not listed if the result is that a person demonstrates a level of physical or mental impairment.

The result is that the policy is believed to better match the insurance payment to the needs of the insured, more claims are admitted and more than one claim can be made for the same condition.

The pricing for this type of product is typically up to 30% cheaper than a regular standalone trauma product, primarily because the policy pays more of the lower level claims.

The main challenge is convincing the adviser that this style of policy is more appropriate than a regular trauma policy. Traditional needs analysis tools and calculators spit out a single, worst case scenario as part of the planning process and advisers then struggle to position the fact that you may get less than from competitor products if lower severity scenarios were to arise. This is a major shortcoming of current research methodologies that ignore client circumstances, needs and sustainability.

Some have therefore considered non-intermediated channels to be a better avenue for distributing severity based trauma products; at the time of writing this paper, no direct-to-consumer, severity based trauma product has been a proven success.

7 International Developments

In order to determine a possible future course for Australia's trauma insurance product development, it's worth having a look offshore to assess what others have done.

7.1 South Africa

The only way that an insurer can achieve consistent and objective decisions every time (and developing the needed trust from its customers) is by relying on definitions and medical terminology. The problem is, how is this done in an understandable way for both financial advisers and the policyholder, whilst maintaining healthy market competition?

In South Africa, this is what the Standard Critical Illness Definitions Project (SCIDEP) set out to achieve[xvi]. The Association of Savings and Investments of South Africa (ASISA) recommend that all member life offices publish their critical illness definitions against a set of standardised definitions (the so-called SCIDEP definitions), which indicate the circumstances when critical illness benefits will pay out. This is similar to what had been done in the UK where the Association of British Insurers issued a Statement of Best Practice, which includes a number of standard definitions[xvii]. However, SCIDEP went further and classified various severity levels.

The SCIDEP committee, consisting of doctors and actuaries from the insurance industry, were assigned the task of coming up with the SCIDEP definitions and it was introduced with an aim of allowing the consumer to objectively compare the payout levels of the various life companies for the four most common definitions: heart attack, cancer, stroke and CABG. For each condition, there is the "main"

definition plus 4 levels of severity, A to D for a total of 16 standard industry definitions. Insurers can pay between 0% and 100% for each definition (Figure 7).

Table 1: SCIDEP Possible Payouts

Event	Level of Severity %			
	A Severe	B Moderate Impairment	C Mild Impairment	D Almost able to do ADL's[xviii]
Heart Attack	***100***	***75***	***50***	***25***
Cancer	***100***	***75***	***50***	***25***
Stroke	***100***	***75***	***25***	***0***
CABG	***75***	***50***	***50***	***50***

Life companies must disclose how much they would pay based on the standardised definitions and what percentage benefit they will pay out for a particular event.

The percentage payable is determined by individual life insurers based on the design of their product. However, in instances where questions arise over whether a claim will be paid under the insurer's definition, the ASISA definition will apply irrespective of the contractual definition. In effect, standardization can lock in "worse" practice and one needs to be careful here.

This standardisation of definitions has not necessarily made the definitions themselves any simpler as medical jargon still dominates. One still needs to understand the difference between a heart attack with a Troponin T of between 0.5 and 0.1 ng/ml and a heart attack with an ejection fraction of lower than 40%. So, for this reason, an explanation of the differences in severity is usually provided in layman's terms.

As an example, severity levels for heart attack ranges from mild heart attacks with full recovery (level D) to heart attacks with severe and permanent impairment of heart function (level A).

- At level D and C, the client's heart function is not permanently impaired and any damage could be repaired.
- Level B entails severe shortness of breath with less than ordinary activity. The person should still be able to perform normal activities of daily living (ADLs) and his/her occupation, if it does not involve strenuous work. Significant lifestyle adaptation is likely.
- Level A entails shortness of breath at rest. The person has difficulty coping with normal ADLs and is unlikely to be able to work.

What are some of the outcomes after the introduction of SCIDEP?

- An insurer cannot pay a higher percentage for a less severe claim
- Insurers must state somewhere contractually what they will pay and display the 4x4 grid
- The policyholders know when they can get a claim assessed
- Enhancements to the policy do not mean that you will necessarily see any changes in the way it is marketed

This approach of linking contractual and medical terminology back to easy-to-understand examples has proven to be quite successful.

Although SCIDEP has assisted consumers with comparing critical illness benefits, competition is as fierce as ever, with companies differentiating their offerings not only through SCIDEP payout levels, but also through the number of conditions they cover beyond SCIDEP.

So although this goes some way to addressing the research house issue, it doesn't seem to be the ultimate solution.

7.2 Singapore

In Singapore, similar to the UK ABI definitions, standard definitions are much more common and apply to 37 illnesses that are covered under a typical trauma product.

The motivation for this is that the industry-wide use of standardised definitions makes it easier for consumers to not only compare products from different insurers, but also allows them to clarify claims criteria and make claims decisions more consistent.

This in turn has lead to quicker settlements and has reduced the misunderstandings that occasionally arise when one insurer pays a claim but another rejects it due to a different definition of the same illness.

Benefit payments vary between 25%, 50%, and 100% depending on severity. For example, blindness payouts will be determined as follows:

- 25% - Total and irreversible loss of sight in one eye
- 50% - Permanent best corrected visual acuity of 6/60 or less
- 100% - Total and irreversible sight in both eyes as a result of accident or illness

Raymond Kwok, the President of the Life Insurance Association (LIA) said that "In standardising the critical illness definitions we took account of the latest medical developments. Singapore's insurers will be able to offer critical illness benefits that are relevant, current, and provide the best combination of value and security for policyholders. The industry will review and include relevant new critical illnesses whenever the need arises"[xix].

The standardisation of critical illness definitions has provided clarity to critical illness benefits, and has made it easier for consumers to compare products from different insurers, and to be confident in the extent of their coverage. As a result, trust is built.

However, as we have seen in South Africa, companies have found ways to compete outside of these standard definitions by introducing new features like multi-pay and early stage payments.

Standardizing definitions has made it easier for consumers to understand what they are buying and when they can make a claim. It has also shifted the competitive focus away from the key definitions and has at least preserved the original intent: to pay for serious conditions.

As in the South African example, though, this limits true innovation as it locks in current product structures and practices, unless these standards adapt to ongoing advancements and changed circumstances.

7.3 Denmark

The question of just how critical the need for critical illness (trauma) insurance actually is, is worth considering. We close this section with some further food for thought.

Horwitz (2009) reported on a study undertaken in Denmark that had looked at a pension fund that provided trauma insurance to 14,000 bank clerks. The aim of the study was to investigate the frequency and distribution of critical illness diagnoses, which would entitle the insured to a payout. It also investigated the development of the various critical illnesses and whether these may lead to permanent disablement or death.

Consistent with results in other markets, the results found that of all the payouts 64% were cancer-related, 15% were related to myocardial infarction (heart attack) and 9% due to stroke. After 5 years, 12% of these people were disabled, while 20% were deceased. This meant that roughly two thirds of people went on to survive with no level of permanence in whatever impairment and debilitation may have been suffered from the critical illness. The first heart transplant recipient survived for only 18 days before dying of complications.

How times have changed.

8. The Future – an Ideal Design

In closing, having considered the facts (and some opinion) presented in this paper, one cannot but wonder: is there such a thing such as an “ideal” trauma product design?

In this paper, we considered what each stakeholder really wants:

- The policyholder wants a product for which a conscious decision was made to buy it in the first place. This means that they must understand what they buy, why it is relevant to their circumstances, priced sustainably over time and with a level of certainty and consistency in terms of claims outcomes.
- The advisor would look for a product that will match client needs or best interests, which they can easily articulate the need for, easy to explain and where a sale can easily be closed.
- The insurer needs sustainable, profitable growth.

However, we have found that:

- although trauma insurance was originally designed to provide cover in times of serious illness, it can now pay on diagnoses where customers don’t even realize that they have suffered an insured event;
- focus of the product has changed over the years, largely driven by competition and research house assessment; and

- medical technology and the ability to self diagnose may impact trauma experience in future.

Where product development has lead the industry to does not appear to meet the needs of all stakeholders. What we actually have is a product that is complicated, difficult to relate to, expensive and hard to sell. It is a product that is positioned as "nice to have" if you have any money left after you have bought life, TPD and income protection insurance (if you are buying any life insurance at all). And it seems to pride itself in paying for what could be regarded as benign conditions.

We offer this closing thought whilst at risk of dividing rather than combining views. However, we believe that evidence presented here suggests that it may be time to put a stop to the arms race. How innovative can another small tweak to a definition here, a material relaxation of a definition there, really be? How can we consider making ever more complicated and expensive products that move further away from the true needs of customers, and call that innovation?

Trauma insurance was designed with a specific purpose in mind: to provide for people upon the occurrence of a life changing and catastrophic event. This type of insurance meets a gap that exists between income protection, TPD and life cover and provides the policyholder with flexibility that they may not have had otherwise. The time is right to design products that are affordable, meets customers' needs and engenders trust.

Hence, the authors venture to offer the following ideal characteristics of a trauma insurance product:

- Simple (and likely less events)
- Standardised definitions for the core events
- Flexible (and likely severity based)
- Affordable

Products alone will not help, though. We need the industry to embrace these drivers and a convinced group of stakeholders that will do what's right for all involved, without introducing more uncertainty.

Life is enough of a lottery as it is.

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[i] CommInsure Life Insurance Survey, 2011
[ii] A partial benefit is payable upon meeting part of the full claims definition. For trauma insurance this is often associated with less severe conditions.
Severity based benefits are similar to partial benefits, with payments varying by the level of severity of a condition, but often with more categories of severity.
[iii] Financial Services Council/KPMG 2008-2010 Lump Sum Experience Investigation Report, February 2013
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