

CRITICAL ILLNESS COVER - A TIME FOR REVIEW

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We would, nevertheless, point out that the opinions expressed in the paper are our own and do not necessarily reflect those of our company. We must also take full responsibility for any errors.

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EXECUTIVE SUMMARY

In the UK and Ireland, CIC has been one of the strongest selling protection products over the 1990s. The product is usually sold to young lives and provides a lump sum following the occurrence of one of a list of pre-defined events. There are two types of CIC, acceleration of death benefits (often in association with mortgage endowments) and standalone. Experience to date would suggest that the product has made revenue profits for most companies. In general, experience under accelerated CIC has been better than standalone. However, CIC is capital intensive, particularly when rates are guaranteed and may not have earned an adequate risk adjusted return on capital.

The UK and Irish CIC markets are very consumer driven. High sums insured are readily available, premium rates often incorporate long guarantees and the full benefit is payable whichever condition is suffered. This keeps the product simple and encourages sales, especially to young lives where premium rates look reasonable. However, we must balance consumer demands with shareholders' needs and ensure the product will meet the requirements of both parties over the long term. Other CIC markets throughout the world are much more circumspect, particularly the advanced markets of South Africa and Australia.

The underlying risks covered in typical CIC contracts are, in totality, increasing in incidence. This is most evident for cancer, caused by the general trend towards earlier detection and for heart surgery, because it is becoming more routine. Apart from medical advances, there are many risks which the insurer cannot control, including increasing consumer awareness and legal interpretation of the definitions. Where there are large benefits payable which are unrelated to the severity of the event the insurers' risks are heightened. These factors could mean that experience will deteriorate in the future.

The contract framework could be improved for both the shareholders and the customers. Insurers would prefer more certainty about future profits and greater ability to manage claims. Customers would prefer a contract which was likely to be both affordable and provide peace of mind in the long term. This was borne out by qualitative research undertaken by Munich Re during 1997.

There are ways in which CIC could be written to reduce insurers' risks whilst continuing to meet needs. In the short term, this is about reviewing some aspects of the current policy structure. In the medium term, it is about reviewing the design and thereby improving product attractiveness for the genuine policyholder. These issues are reviewed within the paper. Such changes should increase the affordability of the contract, particularly in the 40 to 50 age range, where current premium rates often look prohibitive. This in turn should facilitate the sales process.

It is unlikely that "new style" products would replace existing products overnight but they would certainly appeal to a significant percentage of the non-mortgage related market. The current CIC market, both in the UK and Ireland is very competitive. New style products would be inherently less risky and in the short term, could also be more profitable because of the reduced competition.

1. INTRODUCTION

1.1 The Market Today

Critical Illness Cover (CIC) has achieved many of the marketing manager's goals since its arrival in the UK and Ireland in the late 1980's. The product has always sold well and in 1997 ABI figures showed 579,000 policies sold in the UK, around 4 times the level of PHI sales. Bearing in mind that not all providers supply their data to the ABI, the total figure for 1997 sales could be around 700,000. ABI statistics in 1997 showed a 30% increase in sales on 1996 which in turn showed a 68% increase on 1995.

However the marketing manager's success story could turn out to have a nasty sting in the tail, as the current style of product has a number of potential design flaws which could lead to the eventual claims experience being considerably worse than has been so far generally anticipated. This paper is not a rigorous and factual report, but attempts to review the current product structure with examples based on practical experience, and then tries to suggest a way forward which could be mutually beneficial for the public and insurers alike. CIC has many strengths and the paper seeks to build on these, whilst recognising the potential weaknesses for both shareholders and customers. The paper heavily draws on consumer research commissioned by Munich Re in April 1997.

The experience of CIC by type of company and method of selling will vary widely and some points in the paper may have more relevance to non-mortgage related sales. Mortgage related CIC, which has produced a take-up rate of over 60%, may have a very different risk profile. However, the issues raised should not be ignored.

Before moving on to the substance of the paper, it is worthwhile outlining the position in the market today.

1.2 The Current Product

CIC is usually described as a simple product. The potential purchaser is shown a list of diseases covered and told that, if any of these are diagnosed, then he is entitled to a single payment of the full sum insured. The list of diseases was originally intended to cover only serious illness (hence the product name) but, over the years, pressure from competitors has led to an ever expanding list of covered events. Almost by definition this has led to some less serious and more obscure additions with Angioplasty and Aplastic Anaemia respectively being good examples of these trends.

The products are generally sold in one of two formats; an acceleration of death benefits or a standalone product where the policyholder must survive the critical illness for a short time (typically 14 to 30 days) to trigger the claim. Many of the acceleration policies are sold on the back of mortgage advances, with the intention being to pay off the outstanding mortgage on either death or critical illness.

Most products have similar lists of conditions covered and definitions of those conditions, although there are still some significant differences. It is almost unheard of for a contract to pay anything other than the full sum insured on the occurrence of a Critical Illness (except for childrens' benefits) and there is no variation in the amount paid linked to the severity of the condition.

The duration of the cover can be anything from yearly renewable to whole of life and for term assurance style CIC the policy duration can be anything up to 40 years. Many companies offer CIC products with fully guaranteed rates, especially in the broker market and in Ireland. However, in the UK the majority of sales are as add-ons to mortgage endowments or are flexi-whole life plans, both of which usually have some flexibility to vary rates.

So where are we today? We have a product that sells well and has made revenue profits. If this is a winning formula, why do we need to change?

1.3 Do Customers want Change?

We should consider whether the customers fully understand the product we are offering and are comfortable that it meets their requirements. In its present form, CIC is, in fact, a blunt instrument, which cannot provide a complete disability safety net for the customer. The product, if viewed as an alternative to disability income, is hit and miss, sometimes over-providing, but often giving no cover. Our analysis of deferred 26 week disability income business estimates that CIC conditions would cause less than 40% of the claims. In particular, CIC does not cover common disabilities such as musculoskeletal problems and stress (unless they lead to Total and Permanent Disability). As a result, it should be viewed as a luxury product which adds to, but does not replace, the basic security offered by disability income plans.

CIC is sold to customers to provide financial protection against "serious illness" defined by a long list of conditions. Research by Munich Re shows that customers view "serious illness" as a condition lasting longer than six months, as this would dramatically impact on their lifestyle. They also concluded that a list of thirty plus conditions appears exhaustive and, therefore, all inclusive. This was a concern raised by The Office of Fair Trading in the UK in their report "Health Insurance". They also pointed out that some conditions covered for high sums insured are inappropriate given the likelihood of a full and speedy recovery and that this may limit the sustainability of the product.

It is in the interests of the majority of policyholders to keep cover in line with real needs and, therefore, keep premiums to a minimum. This would suggest that the policy coverage should evolve over time to reflect both new diseases that emerge and medical science advances which render other conditions less serious. For example, if certain procedures to correct arterial damage become very routine, is it appropriate that they still trigger large lump sum payments, paid for by the premiums of the non-claiming policyholders? If this also encourages anti-selection and non-disclosure, the premiums of the non-claiming policyholders would increase still further.

1.4 Do Shareholders want Change?

We should also consider the shareholders or mutual policyholders. The business written so far is generally viewed as profitable and, notably in the early 1990's, premium rates were reduced quite considerably (although this was, in part, due to intense competition, particularly amongst reinsurers). Whilst it is almost certainly true that the business has been profitable on a revenue basis, it is probably not the case that the return on capital achieved has been adequate for most companies (although the experience will vary widely by company). This is because the capital employed to prudently reserve for this business is substantial (assuming reserving is in line with the recommendations in the paper "Reserving for CIC Guarantees" presented to the Society of Actuaries in Ireland). In addition, for companies who link required return on capital to the level of risk, it is arguable that CIC should require a higher rate than life and investment products because of the inherently higher risks involved.

In particular, there are a number of concerns about the nature of the risks we are accepting which may make it imperative that the contract's structure and supporting framework (underwriting, claims control, etc) are amended. These issues are considered in the remainder of this paper.

2. PRODUCT CONCERNS

2.1 Product Design Structures

A well designed and robust disability insurance product should meet the needs of its policyholders by providing peace of mind and financial protection, or compensation, appropriate for the disability incurred. Where the benefits are not linked to the financial consequences of disability and offer the opportunity of “windfall” gains, they can influence the customers’ motivations, both at the purchase stage and at the claims stage. In addition, the insurer should be able to quantify future risks with reasonable accuracy and the pricing categories of policyholders should represent reasonably homogenous groups.

With the current style of CIC products many of the criteria are arguably not being met. It is our contention that, in general, many insurers are offering products that:-

- Do not fully allow for the nature of the underlying risks over the contract term
- Encourage anti-selection and non-disclosure
- Allow sums insured that are too high
- Pay “windfall” benefits on an “all or nothing basis”
- Offer under-priced guarantees
- Use liberal claims definitions
- Fail to recognise that an increasingly consumerist and litigious society means more claims will be paid

These issues are now considered in turn:-

2.2 The Nature of the Underlying Risks

2.2.1 Comparison with Life Cover

When writing insurance business it is a fundamental requirement to understand the nature of the risks and the way they may change in the future. The greater the uncertainty about future claims costs, the larger the contingency margin that has to be built into premium rates, or the higher the required risk adjusted return on capital.

Life insurers are used to observing the fact that mortality rates reduce over time and this trend can generally be expected to continue. However this trend has not been seen with disability related risks. Whilst a higher standard of living and advances in medicine have a positive effect on mortality, this is not necessarily the case for disability and, in fact, can result in more people surviving in poor health and a greater awareness of limiting illnesses. This trend of increasing incidence rates can be seen for many of the CIC conditions. Appendix 1 analyses the population trends for some of the major Critical Illnesses.

To try to quantify the overall markedly upward trend in CIC incidence rates is, at best, speculative, but the position is not one that can be ignored.

2.2.2 Cancer

The cost of CIC is dominated by cancer cover, especially for females where cancer accounts for around three quarters of all claims. There is a concern that the true cancer incidence may well have been underpriced. In our policies we pay out for virtually all diagnosed malignant tumours, irrespective of their staging. The latest (1991) UK full national cancer registration statistics show compound increases in registrations across all sites of 2% per annum (see Appendix 1 Statistics). Reported incidence of cancer in some specific sites is increasing even more rapidly (eg. prostate at 5% per annum). The following reasons may explain some of the increase:-

- People are more health aware and are scanned more regularly
- The government have introduced national screening programmes
- Diagnostic techniques are improving
- Underlying exposure to risk factors for certain types of cancer (eg. skin cancer) is increasing

Companies pricing using 1991 statistics could already be undercharging for cancer by 15%. There is no reason why the situation should improve for insurers, as the medical trend is for earlier detection of tumours. Advancing technology should mean that more tumours will be detected whilst they remain in the organ of origin and are treatable and, therefore, their impact will generally be less traumatic and life threatening. Our policies typically pay the full sum insured whenever a malignant tumour is detected, regardless of the prognosis and, therefore, the cover could increasingly provide “windfall” benefits.

In spite of the advances in detection, there is still considerable opportunity for further improvement. This is supported by the fact that most oncologists believe that a high proportion of people still die with (but not from) cancerous tumours which have gone undetected. Pathological evidence supports these claims and figures such as over 50% of men over 70 having latent prostatic cancer have been estimated.

2.2.3 Heart Attack, Stroke and Heart Surgery

The underlying incidence of Heart Attacks and Strokes is quite stable, though the UK and Ireland remain towards the top of the European Heart Disease tables. What is worrying is that our contracts also cover Heart Surgery, which can be an elective procedure to reduce the risk of heart disease and improve health. Here, the increasing incidence is clearly established. Consider the following points:-

- Coronary Artery Surgery Incidence in the UK has increased by 14% p.a. compound for 16 years. The increase is largely linear, it does not represent a huge growth from a low starting point and then a levelling off. If this rate of increase continued to the year 2020, and assuming all other Critical Illness incidence rates remained static, the cost of CIC would double.
- Angioplasty incidence has increased by 9% p.a. compound from 1991-1994.
- In the USA, Coronary Artery Surgery and Angioplasty are almost 5 times and 7 times as common as in the UK respectively. This would suggest that we could still have a long way to go. It may also indicate that people who can afford private sector treatment are more likely to undergo Heart Surgery, which would have worrying implications for CIC insurers.
- Coronary Artery Surgery is now an increasingly routine procedure. Whereas 10 to 15 years ago it was very much a life saving operation, death on the operating table is now no more commonplace than for any General Anaesthetic Operation. On average, patients return to work after two months. Angioplasty is an even more routine procedure where a rapid return to work is common.
- We do not know the level of arteriosclerosis in the normal population. It is, therefore, not possible to determine the ultimate trend. Evidence from autopsies following Road Traffic Accidents has shown this condition to be surprisingly commonplace.

2.2.4 Other Critical Illnesses

Some of the other conditions covered have increasing incidence rates. For example, Major Organ Transplants have increased by 4% per annum over 11 years and are likely to rise still further as medical technology advances enable more damaged organs to be replaced.

In addition, the trend of increasing longevity will lead to many more people surviving to ages where CI incidence is higher. This is particularly true for cancer and the degenerative conditions.

2.2.5 Total and Permanent Disability (TPD)

The other big unknown is TPD. This is usually present in some form in CIC contracts with the condition typically relating to a permanent inability to follow either an "own", an "own or suited" or an "any" occupation definition. This is an extremely subjective cover due to the need to establish that the disability is both "total" and "permanent".

“Total” disability is very hard to determine because claimants can usually perform some aspects of their job but not all, or can only perform the job on “good days”, or can only do the job to a lesser standard than they could prior to the disability. We must also consider what is meant by “permanent”. For the policyholder this may mean twelve months, but for the insurer it may mean throughout life, although legally an occupation based definition may only be applicable up to retirement. There is also the issue of with what intensity of treatment should permanence be measured.

We are also underwriting the occupation and this may be difficult to determine precisely. In particular, some occupations are best suited to younger people and the demands of all occupations change over time, particularly due to economic forces. It is also probably true that the general stress level of working in the modern environment is such that increasingly people will be “burnt out” before retirement age.

The situation is further complicated by the fact that the full sum insured is payable on TPD right through to normal retirement age. This gives policyholders an unmeasurable incentive to claim in their run up to retirement and such claims will be very difficult to refute as the period to retirement becomes shorter. Exacerbating the above problem is the tendency within society for people to retire early, a recent survey putting the figure at 80%, despite the general under-provision of pension benefits. This presents a huge moral dilemma.

These issues raise the probability that occupation based TPD claims incidence will increase markedly in the future and this will again impact on the cost of today’s type of CIC.

2.2.6 Insured Versus Population Experience

Another possible cause for concern is that, unlike Life Cover, CIC insured experience may well be worse than population experience for the following reasons:-

- The timing of the purchase may be linked to an awareness of a health concern.
- CIC policyholders would probably have a greater awareness of the claim event and will be more inclined to be screened, especially as they age and move towards their cover cessation date.
- CIC is more likely to be purchased by people with an adverse family history/genetic profile.
- Some critical illnesses are elective.
- CIC definitions used are open to liberal interpretation (see 2.7).

These additional risks will be linked to the method of sale and type of product. For mortgage related sales, with a high penetration rate, the additional risk will be small compared to standalone broker sales.

2.3 Anti-selection and Non-disclosure

2.3.1 Growing Public Awareness

The general public is becoming more health conscious, supported by education campaigns by governments, the media and local screening programmes. The increased availability of information enables the more health conscious to obtain greater knowledge of their relative risks of “serious illness”. At the same time the public awareness of the availability of CIC has increased and, from our research, this now exceeds 50%.

Marketing theory suggests that a sale purchase requires customer awareness of the need plus product desire before they take action. A number of purchasers may, therefore, be exercising their ability to make sensible personal financial decisions in light of their personal health knowledge. Where insurers price their products using risk categories which contain distinctly heterogenous groups, customers who believe that the premium understates their risk will take advantage of the cover (anti-selection in our parlance).

2.3.2 The Make-up of a Typical “Ordinary Rates” Classification

For the vast majority of applicants of the same age, sex and smoking status the price charged is the same. As for life business, insurers accept a broad diversity of risks within the standard rates CIC group. However, it is likely that the impact of this, in terms of the heterogeneity of the standard rates group, would be increased as the opportunities to anti-select at purchase and elect at claim are greater.

Even without a purchase bias, the spread of risk within the standard rate classification would be broad. For example, the twelve year follow up of the 1973-1975 Multiple Risk Factor Intervention Trial (MRFIT) study in the US of over 360,000 people showed that lives with the highest quintile of both cholesterol and blood pressure were twenty times more likely to die from heart disease than lives falling into the lowest quintile. Even if one separates the lives by smoking status, the risk ratio is still ten to one. Similarly, family history, build and alcohol consumption are established and generally recognised risk factors, yet we allow a wide range of health profiles in the standard rate classification. Additionally our standard rate classification is probably even wider as people may under-state their weight and alcohol and smoking habits.

Without a well structured underwriting process, these extreme risk variations, in tandem with a product that provides a large “windfall” benefit leaves a high risk of unquantifiable anti-selection.

2.3.3 Genetic Pre-dispositions

The rapid advances in genetic science could also accentuate this problem. Already a 50 year old woman with a positive BRAC1 gene is far more likely to develop breast cancer, with the risk increasing some twelve fold. It is quite conceivable that within a few years genetic tests will be able to tell us whether we have a pre-disposition to a whole range of diseases, many of which will be covered by our CIC contracts. For some people this will increase their knowledge of the risk of specific CI events, but with a heightened awareness, the severity of such events may be lessened because treatment will be sought at an earlier stage. Nevertheless, if they purchase a “current style” CIC product it will pay the full lump sum on diagnosis. Knowing and not disclosing genetic test results could be considered non-disclosure, but may be legal in view of society’s concerns about this issue.

2.3.4 Anti-selection and Non-disclosure

Anti-selection and non-disclosure are analogous to tax avoidance and tax evasion in that they are related, though one is legal and one illegal. However, both are costly for the insurer and difficult to eradicate.

The gatekeeper we use to protect our portfolio is the underwriting process. This enables us to redress the knowledge imbalance. Commonly, in the UK, an application form alone is required for sums insured up to about £200,000 (ages under 40). Thereafter we seek a report from their personal doctor (PMAR) up to sums of about £300,000 and then a medical (MER). However, blood tests and ECG’s are not requested as standard until the sum insured exceeds, typically, £500,000.

A well designed underwriting process should be designed to limit the risks of anti-selection and non-disclosure. For some CIC products, sales methods, occupations, etc, this may suggest lower non-medical limits. However, it is argued that it would be impractical to submit applicants for ‘modest’ sums insured for an MER (though interestingly this is market practice in South Africa). It would certainly be difficult for any one office selling into the broker market to go down this route without losing business. Nevertheless, the result of this market practice is that applicants can be accepted for up to of £200,000 cover with at most a PMAR. In addition, the use of multiple applications below the non-medical limits can evade even the most basic underwriting controls. This leaves great scope for the following types of non-disclosure:-

- Not disclosing ‘worrying lumps’ already self-detected.
- Not disclosing directly relevant symptoms, eg. numbness, double vision.
- Understating /falsifying alcohol consumption and smoking status.
- Not disclosing the exact nature of one’s occupation.

None of the above can usually be proved to the degree necessary to refute a claim, yet they undoubtedly happen, especially amongst current high awareness groups (eg. insurance sales people and the (loosely defined) medical profession and their families) and will become increasingly commonplace as people become more aware of the opportunity.

The problems of anti-selection and non-disclosure are more relevant for standalone contracts and where the sum insured looks high in relation to salary. We should recall at underwriting that of one hundred 35 year olds taking out twenty year cover, we would only price for around 5 claims during the 2000 or so years exposed to risk. We, therefore, have no scope to allow our portfolio to be weakened by anti-selective proposers.

2.3.5 The Evidence - Early Claims

A 1995 UK market survey conducted by Munich Re showed that over 12% of claims came within the first 3 months. Whether this indicates negative selection is difficult to say because the mean policy duration in force of all policies was unknown. However, it is interesting to note that the overwhelming majority of these claims were for Cancer or Multiple Sclerosis, the two conditions giving the greatest scope for self-diagnosis.

From a practitioner's perspective it is frustrating, but commonplace, to see such claims and the fact that their nature is so similar. They often involve high sums insured and people in specific high awareness professions (eg. doctors, dentists, salespeople). Companies could underwrite such groups more rigorously and this approach may need to become commonplace (see 4.2.1).

2.4 Appropriate Cover Levels

With Income Replacement Plans (IRPs), insurers have limited the benefits to a percentage of pre-disability earnings to prevent over-insurance, thereby providing a financial incentive to return to work. In the UK, where benefits are tax free, the maximum benefit is around 60% of pre-disability earnings. Any other income being received, for example State benefits or other insurance policies, is often deducted from these amounts.

These sound practices to control moral hazard have not applied for CIC. It is rare for formal financial underwriting to be imposed for cover levels up to £250,000 (around 14 times average salary in the UK and Ireland). This sort of sum insured could generate a gross lifetime income of around £12,500 without even eroding the capital. Where it is used to buy an annuity (particularly an impaired life annuity) the figure would increase dramatically to well in excess of 100% of pre-disability income. In addition the income would not be subject to continued disability.

The problem is accentuated by the fact that aggregation clauses either do not exist, or do not work. Many companies ask no questions about other coverage, and even when questions are asked, they only refer to concurrent CIC applications, or existing CIC, but not existing IRPs. There is also no way of validating the answers, as there is no central registry of CIC policyholders.

One UK claim paid in 1997 (details in Appendix 2) amply illustrates all the problems in this respect. A policyholder earning £20,000 a year pre-disability, and with maximum allowable IRP benefits, secured a CIC payment sum insured of almost twenty times earnings, following the exercising of generous annual indexation options. The claim itself was a contentious Multiple Sclerosis claim. The moral hazard was all too obvious.

CIC is one of few insurance products which is non-indemnity (the other main one being life cover where the price to pay to take advantage of over-insurance is too high for most people!). For CIC it creates a particularly risky position for the insurer as many of the claims triggers result in no long term disability and, therefore, provide “windfall” benefits. As a result the claimant can be in a markedly better position post claim than pre, both healthwise and financially.

From our experience, it is noticeable that claims experience by sum insured is worse than by policy. With health supposedly better for higher socio-economic groups, the “astuteness” of policyholders taking out larger sums insured appears evident.

2.5 “Windfall” Benefits

Most salespeople like CIC because it is an easy sell with many customers believing that the probability of them claiming during the policy term is high. For CIC the large potential payout as a single lump sum, if they suffer one of a long list of conditions, acts as an effective catalyst to the sales process.

From a risk management perspective this structure is problematic. Firstly, it provides a financial incentive for people to allow their health to deteriorate until their condition triggers a payment. This could create potential publicity problems for insurers as it could be argued that their contracts encourage policyholders to delay medical intervention. Secondly, especially for limited term contracts, it can lead to claimants over-stating their condition. This makes claims management difficult. On many occasions the headline condition has been diagnosed and, as the condition may subsequently develop to meet the definition, there is great pressure to pay the claim. Thirdly, because the impact of the different diseases varies so markedly in severity (even within any one disease) the benefit can be way out of line with the insurance need, either because it is too little or too much.

2.6 Guarantees

Life insurers are by far the dominant providers of CIC and they are used to selling other protection products with guaranteed rates throughout the term. In the UK there are few product providers who do not guarantee their CIC rates for at least 10 years. The rationale seems to be that this is the type of policy people want which, as a general rule, is probably correct. However, this may not be the case if policyholders were charged the true cost of the guarantee.

A comparison could be made with investment products. In the late 1970's many insurers gave investment guarantees on savings type products. However, after the report of the Maturity Guarantees Working Party (JIA 107 Part 2) suggested the need to reserve at prohibitively high levels, such products quickly disappeared. The situation could easily be analogous with CIC. Offices have typically reserved for CIC in line with the recommendations of the paper "Reserving for Critical Illness Guarantees" presented to the Society of Actuaries in Ireland, or simply loaded their reinsurance rates. A more precise approach involving stochastic modelling may suggest that, for some companies, their reserves are inadequate.

In the UK, guidance for Appointed Actuaries advises that each separate element of the reserving basis should prove adequate in its own right. This has been interpreted as the reserving basis in total proving adequate to a 1% confidence interval. If it is assumed that experience is deteriorating at 2% per annum it may be difficult to justify the reserving basis of many offices. In fact, the results of Appendix 1 would suggest an accelerating rate of deterioration, which exceeds 3% per annum after ten years. This is an area which requires further research into the results of alternative risk scenarios (following the lines of the Institute of Actuaries AIDS Working Party).

Both the UK and the Irish Government Actuary's departments are increasingly concerned about reserving for CIC and are beginning to question the assumptions used. If reserving levels are strengthened, will offices still be able to afford to offer long term guaranteed rates without pricing the products out of the market?

It is also questionable whether guarantees within CIC are needed, both on rates and policy coverage. Neither are present in Private Medical Insurance (PMI) contracts, a cover arguably closer to CIC than Life Assurance.

In essence, medical advances and secular factors (eg. health awareness, consumer law) are out of the insurer's control and they have limited ability to forecast the long term risks both in incidence and severity. Furthermore, as existing diseases become more controllable, new diseases may emerge. If we look back fifty years, the serious illnesses then were somewhat different in type and prevalence to those today. For example, over the last twenty years we have seen the emergence of ME, RSI, HIV and AIDS.

Is it in the policyholders' interests to pay significantly higher prices now because insurers cannot quantify risks accurately many years into the future? There must be a price at which policyholders would prefer to drop the guarantee and take their chance on future rates and coverage. If the theoretically correct charges were made for guarantees then market forces may well see them disappear.

2.7 Liberal Definitions

One thing on which most leading operators in the CIC market would agree is that the current definitions used are somewhat subjective and can cause problems at the point of claim. In the UK, definitions for six 'core' diseases were standardised by the National Federation of Independent Financial Advisors (now the IFA Portfolio) in 1992 and most companies in the UK and Ireland use these standard wordings. This has been perceived as a big success but, whilst it has simplified the product and aided the sales process, it has created problems at the claims stage.

Many offices want to, and do, use the standard wordings, but recognise that some are imprecise and can lead to unexpected claims being paid. Examples include:-

- A complication of a migraine deemed to be a 'cerebrovascular incident' and therefore paid under stroke, even though the claimant herself accepted she had not had a stroke (details in Appendix 2).
- A claimant paid under Coronary Artery Surgery because one consultant cardiologist 'recommended it' even though three others said that the surgery was inappropriate.

Another concern with standard definitions is the inflexibility to change them as and when the life office deems necessary. Evidence of this is the fact that the IFAP CIC Working Party took four meetings and twelve months to remove the blanket HIV exclusion from the cancer definition, despite there being no disagreement that this was appropriate.

Whatever the definition used, the severity of the event can become secondary to its diagnosis. There is a growing reality that offices often have to pay on the weaker of the headline cover (eg. diagnosis of Multiple Sclerosis) or the underlying definition. Some diseases are notoriously difficult to diagnose and the medical profession argue about appropriate diagnostic methods (as evidenced by a recent letter in 'The Lancet' which claimed that 35% of Multiple Sclerosis diagnoses were incorrect).

CIC providers may think their definition entitles them to delay payment until the diagnosis is unequivocal, but in practice, as soon as the relevant specialist says 'I believe my patient has' it becomes difficult to deny the claim. Even the requirement in the insurance definition for supporting symptoms is often difficult to enforce. Similarly, if somebody undergoes one of the surgical procedures covered, eg. angioplasty, where the definition is objective, it is unlikely a claim will be refuted because the degree of arterial stenosis was insufficient. These arguments can be applied to most of the conditions covered. In practice, if the policyholder has the condition, it becomes almost inevitable that the claim will be paid. Some would argue that this is right and that insurers should not try to hide behind small print. However, the policy has probably not been priced to cover equivocal diagnoses (eg. possible Multiple Sclerosis) and less severe forms of some conditions (eg. angioplasty, rheumatoid arthritis, degenerative conditions).

TPD causes numerous difficulties at the claims stage due to the subjectivity of the definition. The drive for consumer protection increasingly tests the appropriateness of our terminology. In addition, the Courts also take account of the purpose for which the policy was purchased.

Experience dictates that "own occupation" will often be interpreted as being unable to carry out one or more 'core' parts of one's specific job. "Own and Suited" occupations is interpreted as "Own Occupation", as "Suited" occupations are difficult to find. Similarly, TPD based on inability to perform "Any" occupation is often interpreted as "Any Reasonable" as it is not deemed appropriate to suggest to somebody they undertake a job that is unreasonably menial. This stance was backed by the UK Insurance Ombudsman in his 1992 report and by the Court of Appeal in a 1997 judgement (Sargent versus GRE).

These TPD interpretations are far more liberal than insurers priced for and, if accepted, insurers could see an avalanche of claims as their portfolios mature and more policyholders approach retirement.

To summarise, not only are the definitions in common usage often liberal, they will be increasingly viewed in favour of the policyholder and insurers may therefore be providing far wider cover than they may realise or wish to.

2.8 Changing Consumer Attitudes and Rights

The UK is following the lead of the USA and becoming increasingly consumerist and litigious society. This is true both in terms of people's perception of their rights and in terms of supporting legislation. Recent legislation such as the Unfair Terms in Consumer Contracts Act 1995 and the Disability Discrimination Act (DDA) 1996 is swinging the balance of power away from insurers and towards policyholders.

In practice, anything which is deemed to be 'unreasonably small print' or 'not plain English' can be deemed as being not present under 'Unfair Terms in Consumer Contracts' regulations. This may cause some exclusions to be inapplicable and some definitions to be irrelevant. Some companies do try to mitigate this problem by the production of plain English guides, but these do not always help with exclusions.

In the UK, the DDA will also make it difficult to enforce exclusions such as HIV. It would certainly be necessary to prove a direct causal link between HIV and the condition suffered and this would usually prove very difficult. It may be that a similar approach would also be taken in Ireland if such cases ended in litigation.

In addition many insurers are concerned about suffering more bad publicity, particularly in light of the UK pensions mis-selling scandal. For some this may lead to a more generous claims paying stance, which was possibly not anticipated when the products were priced. Bancassurers, in particular, have to take a corporate view and the need to preserve the bank's customer reputation is paramount. Again, this can lead to a more liberal approach to claims settlement.

2.9 Summary

CIC experience already seems to be deteriorating and the above analysis has demonstrated some of the causal factors. The most worrying feature for insurers is that, for current style policies, the future is likely to see a continuation of this trend. With long rate guarantees and limited price elasticity, there will be little scope for insurers to increase terms to produce a reasonable risk rated return on capital.

One solution appears to be to go back to basics and to look at what people really need from a CIC policy. We need to consider whether the contract structure could be modified to meet these needs, yet retain its attraction and improve its profitability. The remainder of this paper looks at this challenge.

3. MEETING THE NEEDS OF THE CUSTOMER AND THE SHAREHOLDER

3.1 How did CIC Evolve?

It is interesting to consider how we ended up with the style of CIC product we sell today. In South Africa CIC (or Dread Disease as it is known there) was first sold in the early 1980s with sums insured set at a very modest level of substantially under R100,000 (c£20,000 at the then exchange rate). The contracts were always an acceleration of death benefits (often limited to 25% of the benefit) and covered only a few conditions, usually cancer, heart attack, stroke and coronary artery surgery. It was significant that this product emerged in a country with only a very basic safety net healthcare system (deemed totally inadequate by people earning a reasonable income). There was also little in the way of private insurance against serious illness with only the quango style Medical Aid Societies attempting (but generally failing) to indemnify private sector costs. Full indemnity based private medical insurance was illegal. In this environment CIC emerged as a practical solution to meet the costs of treatment if ill-health struck and the product was immediately successful in this context.

CIC was then brought to the UK in the latter part of 1986. The first product limited the CIC sum insured to £20,000, was only sold to non-smokers and only partially accelerated death cover. This product was swiftly improved upon in early 1987 by the launch of a product offering cover to both non-smokers and smokers with a sum insured of up to £100,000 and full acceleration.

This set the tone for CIC in the UK; companies could see that the product could sell well and many launched 'me too' products without necessarily conducting research into what their customers' needs were. With a similar product concept, competition centred on covering more conditions, having 'better' (weaker!) definitions and offering higher sums insured, standalone products and longer guaranteed rates.

Whilst this has been the route which the UK and Ireland has followed, it is pertinent to contrast the South African market today with ours today. The differences are:-

- Sums insured are still modest (maximum typically c£60,000)
- Virtually all cover only accelerates death benefits
- Rates are non-guaranteed
- TPD cover is not commonplace and, if present, is not integral
- The number of conditions typically covered remains low
- Many policies pay varying percentages of the full sums insured according to the condition suffered and its severity (example shown in Appendix 4)
- Underwriting is strict with MER's and HIV tests for most people
- The opportunity to buy back life cover after a claim is available

It is also worth considering the evolution of the contract in other markets. In Australia and Israel CIC has a moratorium clause to help protect the insurer against obvious anti-selection or non-disclosure. In addition, in Australia the majority of the plans are annually renewable, giving the insurer considerable flexibility to charge appropriate premium rates in the future. In North America and Israel there are also no guarantees on premium rates. Insurers in these markets also protect themselves by limiting the number of CI conditions, often excluding TPD and having more modest maximum sums insured.

The above shows an alternative approach that could have been used to develop the UK and Irish markets. CIC still sells well in these markets and, despite some

problems with non-disclosure, produces acceptable profits. We went in a different direction and found that the product sells well, but are we nowadays meeting the requirements of our customers and shareholders?

3.2 The Customers' Requirements

For the customer, the current CIC could be viewed as a luxury product, because it does not provide basic financial security on disability, and the size of benefits are often excessive. If it works, it works well, but if it doesn't it fails completely. It is often said that people effect CIC for some or all of the reasons listed below:-

- To pay off loans, particularly mortgage advances, if serious illness strikes
- To give financial peace of mind if one's long term health prognosis worsens.
- To compensate for foreshortened career aspirations after a serious illness.
- To pay private medical costs if surgery or other treatment is required.
- To cover loss of income whilst unable to work.
- To pay for home and car adaptations necessitated by a Critical Illness.

In reality, people are primarily concerned about the first three of the above. Private medical costs are best met via PMI; loss of income, if unable to work, is best met by an IRP and few people ever adapt their home or car.

If we accept that CIC is effected to protect loans and provide financial comfort, then how well does it achieve this? In reality CIC can achieve these goals, but only if the condition suffered is on the prescribed list. The following scenarios could leave a policyholder unprotected:-

- Ischaemic heart disease not needing qualifying procedural intervention
- Chronic musculo-skeletal problems
- Mental illnesses

In addition, the extent of over-provision of benefits within "current style" CIC makes it a product that, for many, may become unaffordable before it is actually needed.

A more detailed review of consumer issues is contained in Section 5 - Into The Future.

3.3 The Shareholders' Requirements

For proprietary companies, the directors have a responsibility to manage the business to achieve the highest long term returns for their shareholders, given the constraints of acceptable risks and other legal obligations. Similarly, the board of management of mutuals have a duty to existing policyholders to ensure that new business is written on acceptable terms.

Prudent risk management requires us to offer products which do not introduce unquantifiable or unacceptable risks to the future value and stability of the business. As a result, we should ensure that any risks undertaken are controllable. This should ideally involve sound product design practices such as no betterment and reliable and proven pricing methods. These should incorporate underwriting procedures to minimise anti-selection and non-disclosure. The products should then produce the required return on capital with the balance of risk within the company being acceptable.

One possible way forward would be to develop and utilise a set of product development pre-requisites which take account of the company's ownership, profitability requirements and corporate philosophy. These should not be set in stone, but any potential product which fails to meet all of them should be re-designed or launched with additional controls in place.

A possible set of product pre-requisites for CIC could be as follows:-

- **Recognise customers' needs** - The product should provide a simple, unambiguous, but valid solution to a set of customer needs.
- **Have a robust benefit structure** - The product should enable the insurer to accurately estimate the claims outgo. This requires objective and legally binding claims definitions which also quantify the severity of the disability.
- **Produce sustainable profits** - The product should produce an acceptable level of profits, even allowing for environmental elements outside the control of the office.
- **Offer acceptable terms** - The product should be attractive to its target market and method of distribution. We should also try to limit lapses by ensuring that the product design satisfies the customers' continued needs and remains affordable. In particular, a few opportunistic claimants should not unnecessarily impact on the premiums for the remainder.

This list could be extended further or refined for an individual company.

With specific regard to CIC, there are three important lessons which can help an insurer take account of its shareholders' long term interests.

Firstly, it is vitally important that all relevant departments (eg. underwriting, claims, corporate actuarial, as well as sales and marketing) within a company are able to contribute their skills, experience and business requirements to the product development process.

Secondly, insurers should resist the herd instinct and be prepared to break the status quo. Some insurers originally resisted launching a CIC product because they saw it as flawed. However, in almost all cases, market competition resulted in insurers reviewing their position. In some cases, the financial position of the shareholders has been protected by a high percentage quota share reinsurance. This is a valid short term solution but does leave the continued availability of the insurer's product at the mercy of the reinsurer, taking a degree of autonomy away from the insurer.

Thirdly, guarantees should only be accepted where the risks can be controlled by the life office, or where the distribution of possible outcomes is narrow, or where the capital held will earn a sufficient risk adjusted return. In particular, where the guarantees are not independent, but could be exposed simultaneously (ie. across all policies), greater caution should be applied and the risk adjusted return on capital suitably increased.

4. THE WAY FORWARD

4.1 Business In Force

For the business in force, retrospective underwriting and product design changes are not possible. In addition, the ability to alter premium rates may be, at best, limited. The company should, therefore, determine the powers it has to manage the business and the additional reserves required for the risks accepted. The key determinants of the business outcome should be continuously measured so that actual can be compared with expected.

Where rates are guaranteed the ability to manage the business may be limited to the claims process. This may need to be reviewed and a standard developed and implemented. This standard should be determined following an analysis of the existing claims definitions, and, where necessary, taking legal advice on their likely interpretation. Without a standard it is likely that practice will evolve piecemeal, possibly establishing dangerous and expensive precedents.

For non-guaranteed terms, the ability to review rates should also be analysed. If the experience is expected to deteriorate the rates should, where possible, be reviewed upwards. However, before any rate review is implemented, consideration should be given to the additional income that this will produce against the loss of reputation and bad publicity that may result. If action is deemed necessary, it is in an office's interest to act as soon as possible. Delays will only lead to higher ultimate premium rates, with associated anti-selective lapses and a self-perpetuating downward spiral.

Irrespective of whether rate increases are imposed, the office should establish appropriate reserves in light of the risks accepted and the ability to control these risks in the future. A claims control cycle should also be put in place, so that the emerging experience can be monitored closely against expected and appropriate action taken at the earliest point.

4.2 New Business

The "next generation" proposals outlined in Section 5 contain suggestions as to how current style CIC products may be revamped to make them more sustainable. Whilst this may represent the medium term goals, in the short term insurers should review the procedures they have in place to protect them against anti-selection, non-disclosure and factors out of their control. This includes the underwriting processes, the product design and the guarantees.

The following points try to focus on such immediate issues.

4.2.1 Medical Underwriting

The underwriting process should be reviewed to ensure it acts as an effective gatekeeper. Application forms should have specific questions regarding numbness, tingling etc. The family history question should also be tightened to glean information about possible pre-dispositions to a wider range of critical illnesses. In addition, further information on other measurable risks could be sought (eg. for ex-smokers the history of cigarette consumption could be requested).

Despite the above, the veracity of information provided on family history and smoking habits (especially past habits) will always be questionable. The non-medical limits should therefore be reviewed and possibly reduced where anti-selection and non-disclosure have proven problematic. This could be for specific products, sales methods, individual brokers or occupations. In particular, experience would suggest that lower limits and, perhaps, automatic independent medicals should apply for certain occupations, such as insurance salesmen and health professionals. These practices could also be supported by greater use of random medical tests.

Where medical evidence is sought, a tailored form should be used, with specific questions on lumps and nervous related diseases. This should be supported by examiners who demonstrably understand the contract and, in recognition of the greater complexity, receive a fee in excess of a life medical.

Consideration should also be given to the sum insured levels used to obtain automatic blood tests. In particular, a lower level could be used to measure cholesterol levels which are a strong indicator of heart disease.

4.2.2 Financial Underwriting

The policyholder should not be placed in a significantly better financial position after the claim event.

Insurers should seek information not just on existing CIC, but also on IRP benefits. New CIC benefits should be limited to a maximum multiple of earnings allowing for all existing disability covers. For simplicity, a conversion factor of say, ten could be used for income benefits. Together with existing CIC, new CIC coverage should be capped at a total of, say, ten times earnings. To enforce this limit it would be necessary for all offices to agree to operate a central combined disability income and CIC register.

The level of automatic benefit indexation should also be appropriate, otherwise the opportunity for financial betterment can quickly re-emerge.

4.2.3 Definitions

The claims definitions should be regularly reviewed in light of emerging claims, advances in diagnostic techniques, Insurance Ombudsman rulings and legal opinion. It is particularly important that we learn the lessons from emerging claims which were paid, but we believe were out of line with the purpose of the contract. In this respect, insurers should look to the reinsurers, who often have broader claims experience and possibly to industry wide claims forums. The importance of the claims definitions would suggest that insurers may not wish to delegate them to an industry body. This can often result in conflicts of interest, delays and unworkable compromises.

Where the claims definition has resulted in, or is likely to result in, customer mis-understanding or breaches of the purpose of the contract, the critical illness condition should be reconsidered. This should determine whether the definition should be restructured, the benefit amount reduced or the condition dropped; examples could be TPD, Angioplasty and Aplastic Anaemia respectively.

Consideration should also be given to the number of events covered. An extensive, but not inclusive list increases the complexity of the product and a risk of customer mis-understanding over the effective breadth of coverage. This may highlight the need to consolidate the definitions.

The claims definition should be consistent between the policy document and all the marketing literature including sales aids. The latter should not make reference to a disease, without stating, where applicable, severity.

For flexi-whole life and possibly other long term contracts we should also consider introducing a right to review policy conditions and premiums after ten years. An alternative would be shorter term products guaranteeing renewability into the then current CIC product.

4.2.4 Elective Surgery

This is a particular area open to initial anti-selection and one where claim election is possible. The limits for elective surgery should, therefore, be reviewed and be linked to the cost of surgery (see Appendix 3). Benefits should, therefore, be reduced to, say, a maximum of the lesser of 25% of the sum insured or £25,000. The balance of the cover would remain in force to protect against the longer term consequences of the surgery and any other disabilities.

4.2.5 TPD

The definition should be clarified and priced accordingly. It may also suit the contract structure and reduce claims repudiation rates by switching to an “activities of working age lives” approach. This would objectively state the functions of work which will be measured and the level of inability required. Offices could also consider separating out the TPD benefit (if this is not already possible), so that it can be excluded or appropriately rated.

Where an occupational definition is used, benefits should be reduced as retirement approaches or the definition gradually switched to a more severe test, such as Activities of Daily Living (ADLs) as used in Long Term Care covers.

4.2.6 Rate Guarantees

Where the future risks are uncertain and rates are guaranteed, stochastic models should be developed which demonstrate that reserves would be adequate in at least 99% of cases. Such reserves should be fully allowed for in the pricing of the products. These reserves could conceivably be significantly in excess of those recommended by the paper "Reserving for CIC Guarantees".

4.2.7 Option Reserves

The guaranteed insurability options within CIC contracts require special consideration, as the risks of anti-selection are probably greater than for life cover. In particular, flexi-whole life contracts sold on a maximum sum insured (10 year) basis require special consideration. The risks accepted by the life office are greater than those within a ten year renewable contract, as the policy terms cannot be varied. The risk of anti-selective lapses at the ten year point must also be quantified.

4.2.8 Flexi-Whole Life CIC

Another area of possible customer misunderstanding is the term "whole life" on a contract where the cover will only last approximately ten years, without a substantial increase in premiums.

The problem could be reduced by one of two approaches. Firstly, at the outset the proposal should disclose the premium that would currently be required to maintain the cover after ten years. Secondly, the plan could be designed so that the cover could always be maintained for the ensuing ten years. This would mean there would be a recurrent annual rate increase to purchase the tenth year of cover (from that point).

5. INTO THE FUTURE

5.1 What do the Public Expect CIC to Cover?

In April 1997 Munich Re conducted extensive qualitative research into CIC and other disability products in order to understand the concerns and purchasing motivations of the public, as well as what they expect from these insurance products.

A summary of the results is presented below. In reviewing these messages, we should consider whether CIC would fulfil the customers' expectations as it is currently positioned and, if not, how to shape the "next generation" products.

- The main reason for purchasing the product was to provide peace of mind that, should a serious illness occur, the claimant and family would have "financial security". This was also expressed as replacing current income and meeting mortgage payments and other obligations (eg school fees). For younger people, particularly those with high aspirations, replacing lost future earnings potential was also important.
- Many people remain unaware of the existence of IRP and CIC. Those who were aware expressed confusion about what each did and, in particular, over the difference between the two. This was not helped by the fact that two-thirds of consumers viewed "serious illness" as a condition which resulted in an inability to work for more than six months.
- Only half the people surveyed liked the way CIC covered a prescribed list of conditions. The other half would have preferred an approach whereby the insurer covered all "serious illnesses". The only reservation about the latter approach was that the application of the definition should be left in the hands of a recognised medical group (eg. The Royal College of Surgeons) rather than the insurer, who was generally not trusted.
- People viewed the list of conditions with some confusion, noting that some serious disabilities were not included, but others that were may not result in significant time off work. In particular some "conditions" were treatments, not disabilities. In addition, concern was expressed that new conditions could arise. However, in general, the cover was viewed as attractive, due to its wide range of benefits and the feeling that there was a relatively high chance of being eligible for benefit eventually.
- Around 50% of respondents liked the idea that the insurer should retain the right to vary coverage and premiums throughout the contract term to allow for the evolution of medical science. The remainder expressed concern that insurers may use this to unreasonably limit cover and control their claims experience.

- It was widely recognised that by paying the same benefit whichever condition was claimed under and irrespective of the severity gave opportunities for “easy money” - large lump sum payments for relatively minor events. Whilst some liked this and saw it as fair, more than 50% of respondents, particularly males, found this inappropriate and inequitable. Many realised that any over-provision of benefits would have to be paid for in the premium rates.
- For young lives premiums were a minor issue, but this became a much greater concern for older lives. In particular, a high proportion of people over the age of 40 thought the current style of CIC products were too expensive. As a result, they were attracted to the concept of scaled benefits, where premiums could be contained or, for the same premium, more cover purchased for “serious” conditions.
- Many people, particularly male respondents, saw the purpose of CIC as providing them with money when they were unable to work due to “serious illness”. This group also preferred that benefit payments should be via instalments, with higher benefits paid the more serious the condition and the longer the survival period thereafter.
- Reducing the coverage to a few core conditions was almost universally unpopular, given the limited reduction in the premium.
- Overall, IRP was perceived as a more relevant and therefore a “better” product than CIC.

The above findings seem to indicate a clear dichotomy with a distinct polarisation of views. One camp liked the current style of product for its perceived simplicity and objectivity (and potential for claiming!). The other camp preferred a more general product aimed at meeting a wider disability need.

It is also interesting to note that IRP was viewed as a better product than CIC, whereas respective sales volumes would suggest the exact opposite. Low IRP sales compared to CIC may reflect some of the following:-

- CIC with its large lump sum benefits appeals to the greed mentality (high headline benefit numbers)
- The public are sceptical about insurers paying claims and prefer to deal with insurers on a “one-off” and clearly defined basis.
- CIC is actively promoted, especially in connection with mortgage related sales.
- IRP is viewed as having stringent occupational and medical underwriting

Whatever the reasons, it is apparent that replacing lost income if unable to work due to ill health is a recognised need and one for which many people would expect CIC to cater. We should, therefore, consider whether a revamped CIC style product should move towards IRP. This would appear to suit the public who are keen to buy products that help to alleviate the adverse effect of serious illness on earning power, but are unhappy with existing IRP products (perhaps because of the perceived pressure placed on them by insurers to return to work).

5.2 Product Requirements

Before considering alternative methods of redesigning CIC, it is worth reviewing the basic needs customers may have following disability, in light of the consumer research. It would then be possible to consider the benefits that could be met by the “next generation” CIC alone or as part of a disability package.

The requirements of the public from disability products could be split into basic capital and income needs.

5.2.1 Capital

- **Expenses incurred** - This would cover medical and recuperative expenses, plus the costs of home adaptation and assistive devices. The sums would result in no personal financial gain.
- **Debt management** - This is linked to the inability to work again or to work at the same level as prior to the disability.
- **Lump Sum Payments to compensate for suffering and foreshortened aspirations** - The sum could depend on the trauma of the event (the duration of the medical treatment and its level of success) as well as the age at which the condition manifested itself.

5.2.2 Income

- **Normal living expenses** - This would provide a level of income sufficient to maintain a reasonable standard of living. In some cases, the income would include the servicing of debts and would, therefore, reduce if the debt is repaid.
- **Additional expenses** - This would cover nursing care costs and other additional expenses that would not be incurred by a healthy person.

The needs of the customer, therefore, include capital and income components. However, insurers have often promoted capital based products at the expense of income benefits, although often the greater need is for income. This has been done partly for the administrative ease of the insurer and partly because of the attractively high “headline” numbers of capital based products. Customers fail to understand the true cost of purchasing inflation proof income benefits and invariably underestimate the equivalent capital cover they need. This has applied to both protection products and pensions.

The insurance company should consider these basic needs and how they could be developed into a simple and viable product. The product should provide real value to the customer, not just to the insurer and sales intermediary. More importantly it should not fail when needed. This requires us to offer customer focused products which are relevant and sustainable across the customer's life stages.

5.3 What Added Value Could CIC Provide?

We should also review where the insurance boundaries should be in delivering our service. In general insurance, the scope of insurance products has considerably widened. For example, in motor insurance, after an accident some companies arrange to tow away the car, deliver the customer to their destination, provide a replacement vehicle, arrange for all the repairs to be carried out and the car to be delivered back to the customer. This shows that we cannot consider ourselves to be an isolated industry, but part of a customer service mechanism, where considerable added value can be gained by linking and controlling the customer processes. Whilst insurance can provide the financial peace of mind, alone it is no more than a re-distributor of money.

In order to provide a more comprehensive service to our customers we should aim to provide the following.

5.3.1 Pre Claim

The support that may be required by the customer during the lifetime of the cover would be:-

- Peace of Mind - We should provide comfort that the individual and dependants have financial security if they suffer a health crisis.
- Preventative Advice - We should seek to reduce the risk or severity of a serious event by providing advice and information.

Peace of Mind is particularly important and represents a general desire for financial security and the value that is derived from this, even when the customer does not need to claim. The research by Munich Re (referred to in Section 5.1) highlighted this point as the main reason for purchasing insurance.

We should also recognise that, for insurers and their policyholders, it is always better to seek to prevent an event, or limit its severity, than to deal with the consequences following it. For example, as medical science advances we understand more about the causative risk factors and their multiplicative effect. This could enable us to target our high risk customer groups and provide them with specific medical checks and advice in order to lower their risk. Healthchecks and follow up medical advice could be given to all policyholders, or limited, say, to those aged over 50, or those accepted on rated terms.

To successfully extend the scope of the service, it is necessary for the customer to have trust in the sales process, the product and the insurer. In this respect, insurers have a credibility gap to overcome. Customers do not generally trust insurers and believe that where conditions are not pre-defined insurers would seek to alter the contract to avoid paying claims. This may extend to a belief that insurers would abuse any subsequent health data to the customers' detriment.

5.3.2 Post Claim

Following a claim, the customers' needs will be different and the product should provide:-

- Recovery and Recuperation Support - We should provide information, advice and support where appropriate.
- Financial Support - We should help to pay for both the unplanned and planned expenses.

It is, of course, in the customer's long term interest to get back to health as quickly as possible and we should seek to support this process. The clinical director of Cardiology at the Royal Infirmary in Edinburgh suggested that a return to work following a heart attack can have long term benefits. Research carried out in the Netherlands for IRP products has shown that a proactive approach to claims management can result in positive benefits for the customer, as well as the insurer, through an early return to work. If products continue to pay benefits as a single lump sum, insurers will gain credibility by provision of such post claim support. If we are paying phased benefits depending on continued inability to work, there may well be associated financial savings in such an approach, although scepticism about the motives would need to be overcome.

Support could also extend to information on state benefits and the direct purchase of medical and recuperative services, perhaps with the financial advantages of buying power and cost control.

5.4 "Next Generation" CIC Designs

If the existing products need to change in order to better meet the needs of the customers and to earn a sufficient risk related return, we should be careful that the "next generation" products address the current concerns without creating new ones.

The following proposals take account of the issues raised in the previous sections, including the results of our consumer research. They propose some potential future designs and are meant to be illustrative, not exhaustive.

5.4.1 Scaled Benefits

A successful insurance product should ensure the benefits are meaningful in real terms. For the insurer, the maximum benefits should not encourage anti-selection through “windfall” gains, but for the customer, the limits should not be so low that they do not allow for the financial impact of serious long term disabling conditions.

For existing CIC products, where a single benefit amount is payable for any one of an extensive range of conditions, no allowance is made for the fact that each event may have a markedly different prognosis for the customer, even within one condition (eg cancer). As a result, the principles of good insurance practice are broken. For the insurer, the risks within the business are increased. For the customer, the potentially excessive benefits add to the premiums and may force the customer to take a lower “headline” cover than that required, in order to afford the policy.

The issues can be graphically illustrated with a simple example. Where a person has a severe stroke, resulting in paralysis and loss of speech, the long term financial impact could be enormous. For this event, insurers should be prepared to provide high maximum benefits, as the risk of anti-selection at purchase and election at claim are virtually nil. In comparison, for Coronary Artery Surgery or Angioplasty, in most cases the person would probably be back at work within three months and the only financial support required would be to cover the direct and immediate costs of the event. Often, some of these are met through PMI and company sick pay schemes. In addition, for this event the ability and incentive to anti-select at the underwriting stage is much higher and the risk of election at the claim stage exists (and increases in line with the benefit amount).

There are many other similar examples. In particular, later stage cancers could have a devastating impact on the policyholder, but some first stage cancers (eg breast, prostate) can often be treated successfully, especially if diagnosed early during screening. Similarly, within heart attacks, strokes and the other listed conditions there are degrees of severity.

TPD can also be graded, with the most severe condition resulting in the failure of LTC style ADLs and the least severe resulting in the failure to carry out the claimant’s “own occupation”.

The advantages of scaled benefits for the customer are that they could reduce the premiums (or increase the “headline” sum insured for the same premium) and for reviewable rates, they should be more stable in the future. In addition, the maximum sums insured for the most severe conditions could be increased. The advantages for the insurer are that the business will be less open to anti-selection at entry and there should be fewer disputes at the claims stage. As a result, the capacity for large cases, in particular Keyman policies, could also be increased. In addition, the experience may also be more stable in the future, as the higher incidence of claims (allowing for advances in diagnostic techniques and treatments) may be balanced by claims more commonly relating to less severe conditions and therefore triggering lower benefits.

These arguments would suggest that “next generation” CIC products should provide scaled benefits, which recognise the severity of the claim event. For the customer, the severity could be measured in two ways. Firstly, by the financial impact of the event and its subsequent effects and, secondly, by the compensation required for the trauma of the event itself. The former would suggest that a larger sum would be required for a significantly disabling event, which has a limited effect on mortality. The latter would suggest that a larger lump sum should be payable for a life threatening event. In both cases, a much smaller benefit is justified where the policyholder is able to return to their normal work within a short time.

In designing scaled benefits we should build on the product’s success factors, that is its perceived simplicity and clarity of coverage. In particular, we should take care not make the product hard to understand and we should not introduce another ground for dispute.

The product could also recognise that the customer has both capital and income needs.

Capital Benefits

The existing CIC products primarily pay a single lump sum equal to the sum insured. This capital structure could be retained with a Scaled Benefit Plan, but instead, the insurer would pay a benefit equal to a pre-defined percentage of the sum insured.

For example, the insurer could pay a different fixed percentage of the sum insured on life threatening conditions, serious disabling conditions and surgical or “minor” conditions. For life threatening and serious disabling conditions the insurer could pay a fixed percentage of the sum insured of between 50% and 100%, depending on the purpose of the contract. Alternatively, the exact percentages payable for life threatening and serious disabling conditions could be selectable by individual policyholders to fit in with their requirements. More importantly, for surgical and “minor” conditions a smaller benefit of, say, 25% of the sum insured would be payable. In this case, life threatening conditions would include severe strokes, major heart attacks and metastatic cancers (ie spread to two or more organs). Serious disabling conditions would include multiple sclerosis, motor neurone disease, loss of limbs, blindness, loss of hearing and the failure of ADL’s. Surgical and “minor” conditions would include surgical treatments, stage 1 cancers, minor strokes and minor heart attacks.

In addition, for this structure to remain relevant in the future, the categorisation of conditions could be subject to regular review. This may not be comfortable for the customer, even though it is accepted for other general insurance products, in particular PMI. An alternative approach would be to limit the guarantee of the policy conditions to five years.

With this benefit structure, the policy would continue until the full sum insured has been paid or the policy expires. This would enable the policyholder to claim more than once, though probably not for the same condition (unless it increased in severity, eg. cancer). For acceleration plans, the balance of the sum insured would be payable on death at any time. It would also answer the criticism of the current contract that policyholders could allow their condition to deteriorate unnecessarily in order to make a valid claim. The design would also support the use of screening services within a health protection and management package.

An example of such an approach to scaled benefits used in South Africa is shown in Appendix 4.

Income Benefits

An alternative way of providing scaled benefits would be to make regular benefit payments, where the condition results in continued disability. This may have added attractions for customers whose prime concern is maintaining their standard of living. For this group, capital benefits have limitations, as the customer would be concerned that the sum could be exhausted and they may have no experience of managing large investments, particularly if they are disabled. In addition, investments are often subject to tax.

In this case, the insurer could pay the sum insured in instalments, or as a regular income. To provide benefits also dependent on severity, the capital sum payable in instalments would have to be scaled (as detailed above). Income benefits could be payable up to retirement age, subject to the continuation of a disabling condition (eg. remaining unable to carry out their "own occupation" or continued failure of ADL's). In this case, the more life disabling conditions would receive greater benefits. As a result, those who die shortly after suffering a critical illness or return to work will receive lower total benefits, although for those returning to work the policy would remain in force.

This structure may not provide sufficient compensation for the customer to cover the trauma of the "serious illness". However, the problem is not insurmountable and could be met with an additional capital benefit, or a guaranteed minimum income period.

The benefit of this structure would be particularly apparent for TPD, as the test of incapacity would not apply once only and the benefit size would automatically taper over the lifetime of the policy.

5.4.2 Healthcare Packages

In the UK the National Health Service aims to meet the costs of acute medical treatment. Additionally almost 12% of the population are covered by Private Medical Insurance (PMI). PMI is a luxury product as it replaces cover within the NHS and provides the customer with control and choice in obtaining medical treatment. Control enables the policyholder to determine when the treatment is carried out and choice covers the particular hospital and consultant. Medical costs can also be met by newer insurance products such as Major Medical Expenses (MME).

For both private and public sources of funding, there are cost pressures which have increased the expenditure required to maintain the level of health provisions. For the private sector, insurance premiums have rapidly escalated. This has been driven by medical advances and increased health awareness extending the range of treatments and their costs and frequency of use. This has increasingly impacted on the product's affordability. In addition, the scope of the cover has become more focused on acute conditions, providing limited benefits for chronic conditions (eg cancer and dementia). The same cost pressures have impacted on the NHS which have resulted in rationing of the cover, principally by increasing waiting lists.

The healthcare market is, therefore, in a state of flux and a new affordable product which can provide financial support to meet the costs of treatment may satisfy a large potential need. A "next generation" critical illness plan combined with a form of medical insurance could break the existing mould. These two products have a natural fit, as both pay benefits following a health crisis. In this respect, the medical insurance could cover the costs of the acute conditions and critical illness could recognise the impact of both immediately life threatening and chronic, often incurable, conditions.

The advantage to the consumer would be that the cover could provide for more than the costs of medical treatment, by incorporating a benefit giving financial compensation for a serious event which results in long term disability. This type of structure would develop the original concept of CIC in South Africa, as envisaged by Dr Marius Barnard, where the product contributed to the costs of acute medical treatment for a small range of serious illnesses.

One example of such a healthcare package would combine CIC with MME to provide a cash compensation health plan. In this case the "next generation" CIC product would be limited to life threatening and serious chronic illnesses where it would provide compensation for the event. Elective surgery and treatable "serious illnesses" would be covered under the MME element. This would pay graduated benefits linked to the costs of surgical treatment, with, perhaps, a percentage of the benefit paid where the treatment was carried out free of charge in the public sector. In addition, by limiting the cover to surgical treatment and providing structured monetary benefits, the product should be more affordable at the outset and the impact of medical inflation should be reduced.

The advantages for the insurer would be that it would enable the “next generation” CIC product to exclude the elective surgical procedures by switching them to the MME component of the contract. This should curtail an increasingly concerning source of claims. For a life insurer, this would enable medical cover to be provided without the need to offer indemnity benefits which may not be affordable in the long term.

As an alternative the healthcare package could be designed to include low cost PMI with a “next generation” CIC product. The low cost PMI would either limit the benefits to inpatient stays only, or include a significant monetary excess. This would achieve the goal of covering the combination of life threatening, chronic and “treatable” benefits previously outlined. However, in this case, the plan would provide cash and indemnity benefits. This healthcare package may be attractive for new entrants and encourage those who can no longer afford PMI to trade down. It may even be seen as a more valuable product by cost conscious groups, who could not afford a full private medical plan, or could afford to meet either outpatient costs, or a reasonable excess.

5.4.3 Disability Packages

A particular concern that has been raised about CIC is that the customer misconstrues the breadth of cover and incorrectly believes that it covers all own occupation related disabilities. The market research by Munich Re showed that the public view “serious illness” as a disability that stops them working for more than six months and that they find it hard to choose between CIC and IRP, if they can only afford to purchase one. It is also necessary to recognise that, even for specialist advisors, the distinctions between the individual products have become extremely blurred. The research concluded that consumers prefer the security of occupational based disability protection, but like the clarity of CIC.

In the “next generation” disability plans there is an opportunity to merge the separate disability products, such as CIC, MME, IRP and LTCL. This could enable one disability package to fit all needs. However, care would need to be taken so that the package meets the consumers’ needs and budget constraints. With modern computer systems, this can be achieved with a menu-driven product, so that choice and priority can continue to be exercised.

The individual benefits under an IRP product and CIC could be enhanced by combining their features, so that more comprehensive protection is given. The packaged disability plan would, therefore, provide an income benefit to cover loss of current earnings and, where applicable, provide a capital sum to service any debts, and compensate for serious illness and foreshortened career aspirations. The costs could be controlled by eliminating any overlap in benefits, although in some cases separate benefits would be required. In addition, the use of one application form, one medical process and one set of administration procedures should simplify the sale and reduce the processing costs.

For this product the “next generation” CIC product could incorporate a scaled benefits structure (as described in Section 5.4.1), or pay the full sum insured on a limited number of “serious” events.

One product example would be a Mortgage Repayment Protection Plan, designed to meet the customer’s mortgage commitments when he is sick or disabled. This would pay the regular monthly repayments, or a fixed monetary contribution, on temporary disability and cover the outstanding debt on death, a limited range of “serious” illness and TPD. For less “serious illnesses” a proportion of the mortgage could be repaid, so that the debt could continue to be serviced from the claimants post-disability income. In addition, the benefits could be enhanced with involuntary unemployment insurance. This type of package meets a clearly defined need and is simple to understand.

Another example would be a Personal Provident Fund, which pays a pre-defined percentage of the sum insured on a range of different disability related conditions. This could also be extended to incorporate LTC and MME. A simple structure would be to pay 20% of the fund on temporary disability lasting beyond the deferred period and then annually thereafter whilst the disability continues, until the sum insured is exhausted. The balance of the sum insured would also be paid if one of a limited range of “serious illnesses” or TPD (based on ADL’s) were suffered.

In both these examples the insurer has a product which helps them manage claims more effectively. In particular, where the CIC claim may be rejected, but the claimant is temporarily disabled, a benefit would still be payable and the “all or nothing” negotiation is avoided. In addition, the juxtaposition of benefits for the policyholder should help to avoid potential confusion about the interaction of different disability covers.

6. CONCLUSION

If the life assurance industry has a tarnished reputation for being staid, slow to respond and risk averse, the rapid development of CIC should have helped disprove this. Over the last ten years, the CIC market has rapidly developed from its origins in South Africa. The cover available here is more extensive, sums insured are higher and guarantees longer than in South Africa, or other markets such as North America, Australia and Israel. With CIC sales exceeding those of IRP by a factor of four and with their continued rapid growth, some may argue that this is a genuinely successful product. However, the long term success of a product should be measured by the profit it generates for the company's shareholders, against the risks accepted, plus the lifetime security and comfort it provides for the policyholders. It is difficult to forecast how well CIC will succeed on these measures.

This paper reviewed the business, based on practical experience and attempted to highlight some key issues. In particular, there is evidence to suggest the incidence of many of the core Critical Illness conditions is increasing, with the opportunity for large capital sums resulting in possible anti-selection at purchase and elective claims. Many contracts have guaranteed terms which limit the ability to respond to factors out of the insurers' control and need to be supported with considerable capital. In addition, the contract may not provide the customer with peace of mind; that they are protected against "serious illness", and that the cover will remain affordable in the long term.

Whilst the existing CIC concept is in need of review, any review should recognise the success of the contract through the provision of a capital sum, particularly for mortgage related policies, and the perceived clarity of the critical illness definitions. The review should build on these strengths.

The paper proposed a two stage review. Firstly, in the short term the high risk elements of the existing contract should be reduced. It is important to return to the principle of no betterment and this requires more effective financial underwriting, particularly for non-mortgage related business and a restriction in elective benefits, particularly Angioplasty and Coronary Artery Bypass Grafts. Risk management could be improved by tailoring the underwriting process to the risk of anti-selection, limiting the guarantees on rates and policy conditions and actively reviewing the claims definitions and emerging experience.

Secondly, for the medium term the paper proposed introducing new product designs. In particular, there is an opportunity for a responsive solution, where the benefit amount is scaled in line with the severity of the event and subject to change in line with advances in medical science (including diagnostic techniques and treatments) and the appearance of new diseases. In addition, new healthcare and disability packages could provide customers with broader based products offering affordable peace of mind. New solutions could provide indemnity covers, income benefits, capital sums or a combination.

By building on the strengths of CIC and removing the weaknesses, the "next generation" CIC products may be a success story for the next decade.

APPENDIX 1

CRITICAL ILLNESS STATISTICS

1. Introduction

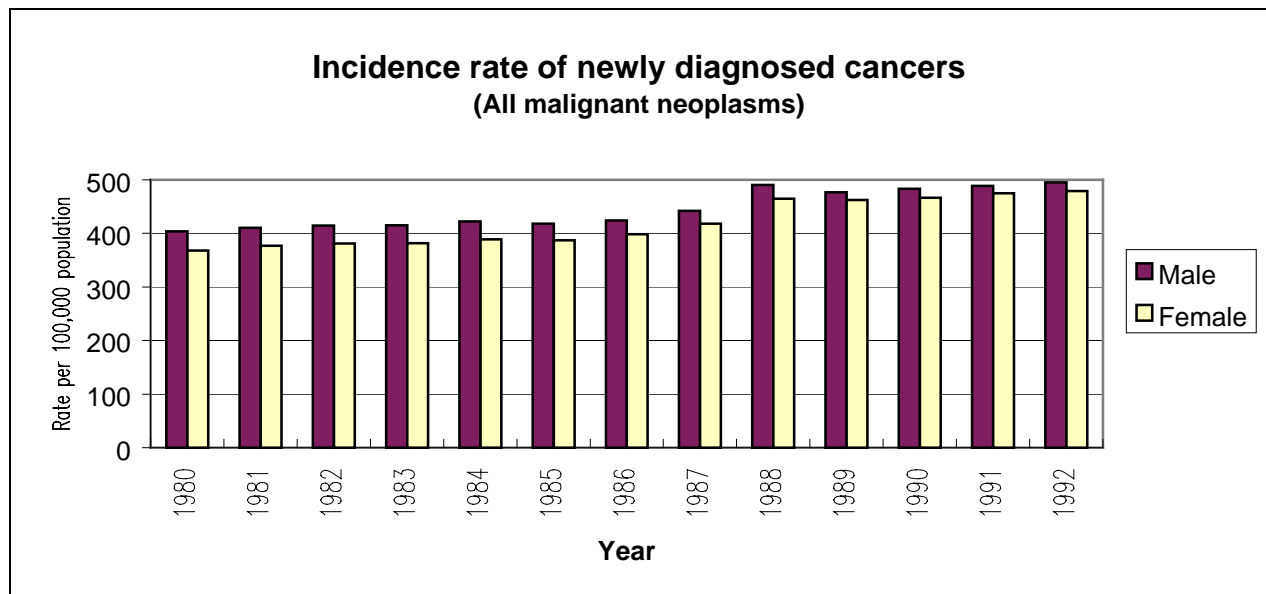
CIC is a compilation of various risks. In this Appendix we look at the individual trends that can be observed in published statistics for the main component covers. The original source for pricing data was population statistics. It is not the purpose here to check the adequacy of life offices' premium levels, but to suggest that, if there are discernible trends in the general population, we need to quantify these.

We looked at the four main causes of claims; cancer, heart attack, stroke and coronary artery bypass graft/ angioplasty. We looked for trends within published population data over the recent past.

A more detailed time series analysis would have age weighted the population experience to reflect our CIC portfolios to help determine whether improvements or deteriorations were more specific to certain age groups.

2. Cancer

We looked at the trends in cancer incidence in the UK overall and in five different key sites. The diagrams below show the historical onset of newly diagnosed cancers over the 13 year period 1980-1992 in the UK.

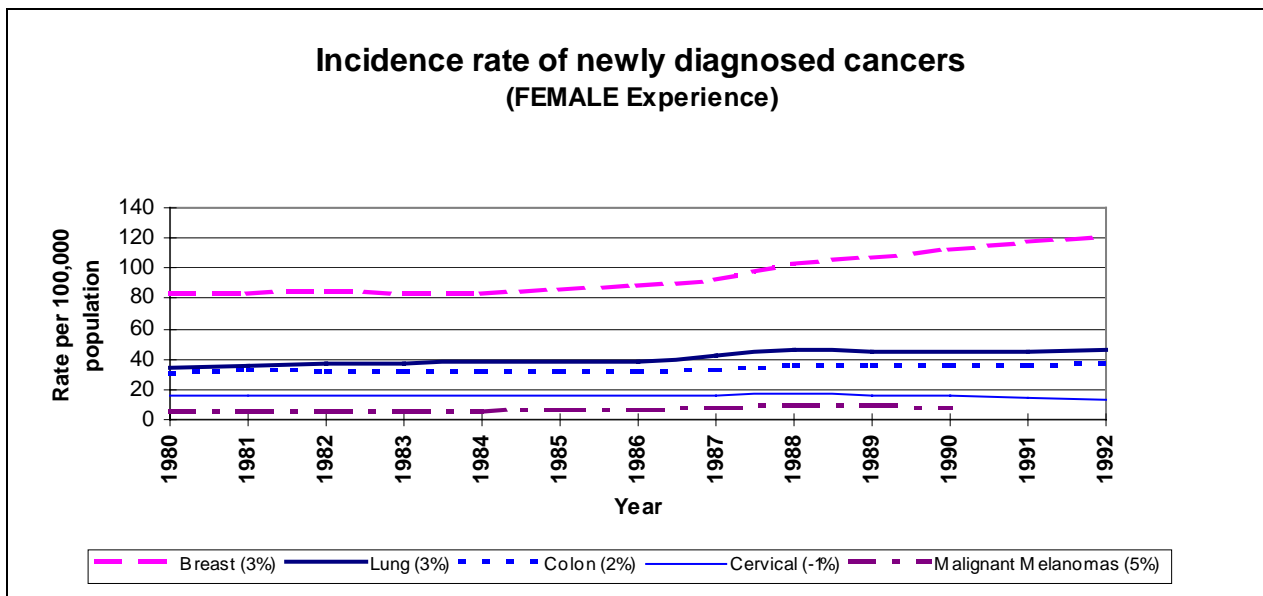
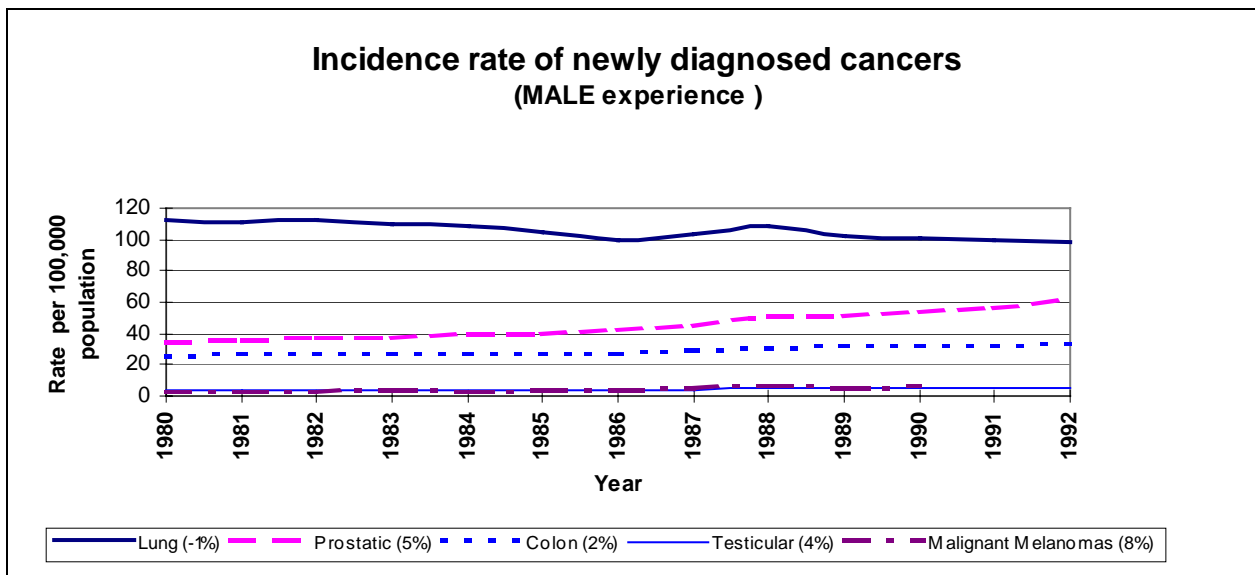


Source: Cancer statistics registrations (Office for National Statistics, 1980-1990); ONS Monitor (1991, 1992)

The average rate of increase across all sites from 1990 to 1992 was 1.7% p.a. for males and 2.2% p.a. for females.

Recently published UK statistics suggest that males account for about 60% of CIC in force. A compound annual increases for all cancers across the CIC portfolio is thus around 1.9% p.a.

The following diagrams show changes in incidence rates in specific key sites.

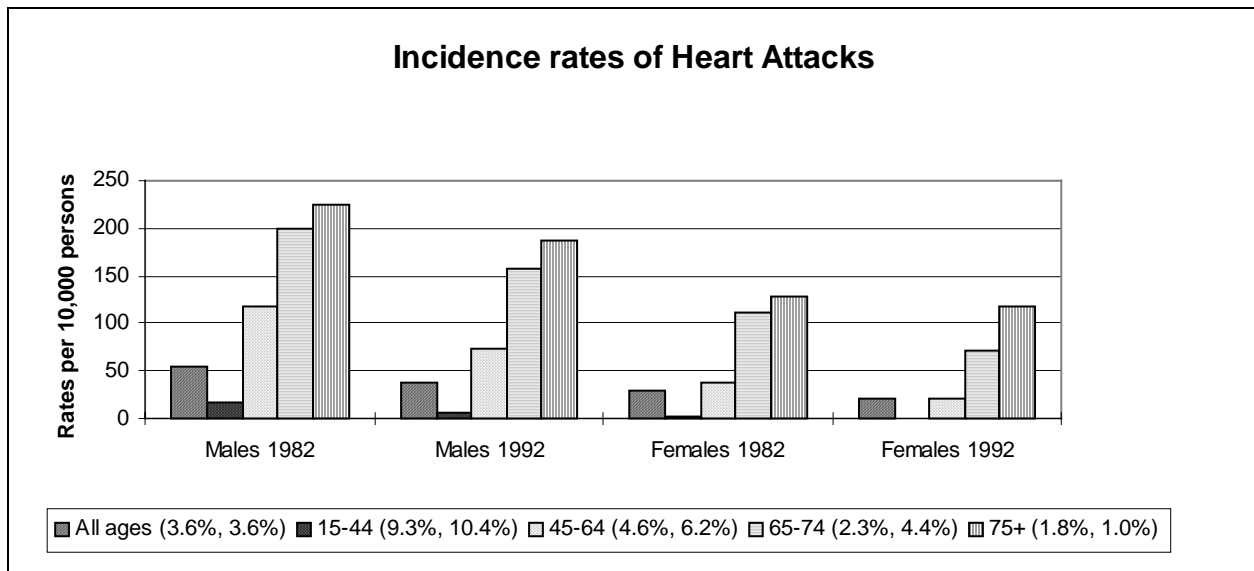


Source: Cancer statistics registrations (Office for National Statistics, 1980-1990); ONS Monitor (1991, 1992)

Note: Figures in bracket show the annual increase in incidence rate for each site over the data period

3. Heart Attacks

Heart attacks are the second largest source of critical illness claims. Recent evidence indicates that the onset of myocardial infarction episodes is reducing year-on-year for a number of reasons (better diet, more exercise, better general attention to health, improved earlier medical assistance and intervention etc.). The graph below illustrates a gradual but significant reduction in heart attacks in recent years in the UK.



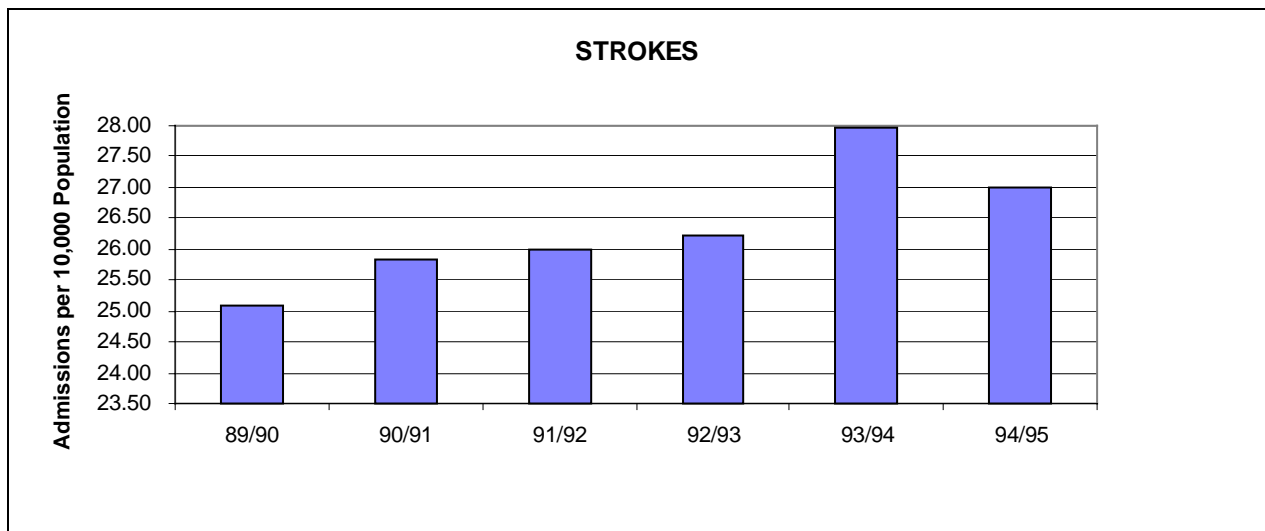
Source: Coronary Heart Disease Statistics (British Heart Foundation 1997)

Note: Figures in brackets show the annual decrease in incidence rate for males and females over the data period

The overall decrease in heart attacks over the ten year period was 3.6%. Our projections use these figures for heart attack claims. This number is consistent with the Australian (Pricing Dread Disease Insurance) paper, but actually more optimistic than that assumed by the Irish Society's Working Party (between 0.5% and 1.0%)

4. Strokes

Strokes are the third largest contributor to critical illness claims. We examined the history of UK cerebrovascular incidents over a six year period 1989/90 to 1994/95 and the results are plotted below.



Source: Hospital Episode Statistics (Department of Health)

We have used an overall growth rate of 1.8% per annum in our projection model. The UK population trend is somewhat at odds with the Australian, US and Swedish sources quoted by the Irish Society Reserving paper which have remained constant. However, it may evolve in time that UK experience from the base of 1993/94 shows an improving path.

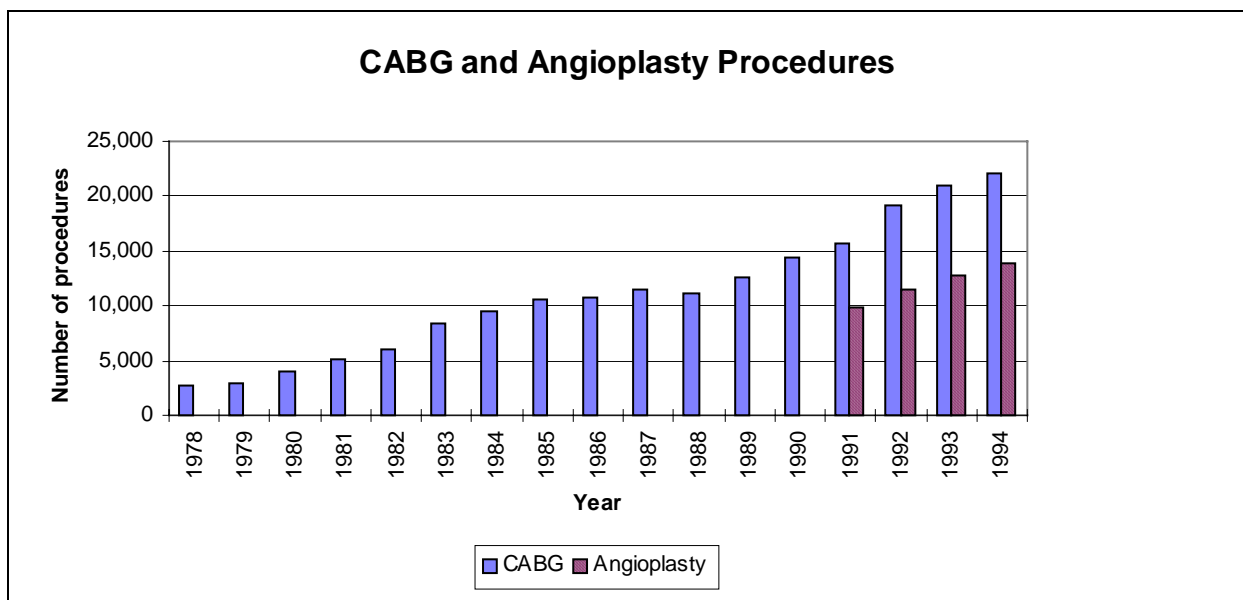
5. Coronary Artery Bypass Grafting (CABG)/Angioplasty

The fourth largest cause of critical illness claims is coronary artery surgery and angioplasty. The frequency of operation in the US is 5-7 times that in the UK. The table below demonstrates this fact.

Country	CABG Incidence per 1,000 population	Angioplasty Incidence per 1,000 population
USA	1.90	1.60
UK	0.40	0.25

Data Source: *Coronary Heart Disease Statistics (UK)*, *National Center for Health Statistics and Hospital Discharge Survey (USA)*

In looking for trends, we obtained statistics from the British Heart Foundation covering the period 1978 to 1994. The numbers provided show a marked and steady increase over the 17 years of analysis for bypass grafts and an equally significant path for angioplasty, although over relatively fewer years.



Source: *Coronary Heart Disease Statistics (British Heart Foundation 1997)*

The annual growth rate of 14.2% is taken into our projection model below. Even at this rate, the UK incidence does not exceed the US 1994 rate for twelve to fifteen years.

The Reserving for Critical Illness Guarantees paper made the assessment that the “rapid increase” expected in such surgical interventions in the population would be confined to those who had already suffered a critical illness or who would be about to. We thought it more prudent and, possibly more realistic, to assume that observed trends would apply equally to first timers.

6. Projections

Having identified possible trends in the four main underlying risk areas, we next needed to quantify the impact of these on our portfolios. The rates of potential claim increase apply to each risk separately. We started with a claims cost index of 100 at 1 January 1997. The components of this risk cost are split between the four main causes of claim as analysed above in proportion to the UK claims data provided by UK offices in a recent Munich Re survey. These percentages, tabulated below, are broadly similar to the expected incidences underlying IC94 (cancer 52.5%, heart attack 22.2% and stroke 7.8%).

Disease	Percentage of total claims	Percentage projected annual increase
Cancer	54.0%	1.9%
Heart Attack	21.2%	-3.6%
Stroke	7.1%	1.8%
CABG/Angioplasty	4.3%	14.2%
Other	13.4%	0.0%

These account for nearly 87% of all claims. If we make the somewhat cavalier assumption that there will be no worsening trend in the remaining 13% (note that the balance includes TPD and Multiple Sclerosis), we have a simple basis for projection.

We then assume that, for observation purposes, this is a closed book of business and that the office in question has no rights of review (effectively guaranteed business). We ignore the effects of selective lapses.

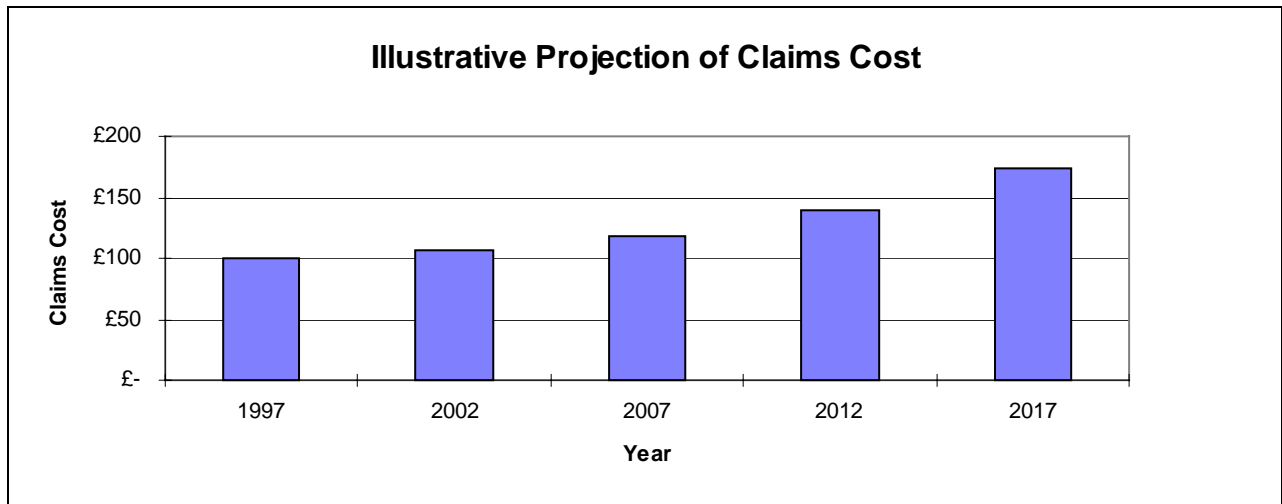
The experience emerging is tabulated here:

Year	Cost of Claims	Annual Increase in Previous Quinquennium	Average Annual Increase from Outset
1997	100.0	-	-
2002	106.5	1.3%	1.3%
2007	118.0	2.1%	1.7%
2012	138.8	3.3%	2.2%
2017	173.6	4.6%	2.8%

The purpose of this projection is to attempt to quantify the outcome of our current policies in force if the trends in population are mirrored by those already underwritten. A 1.9% p.a. increase (cancer) may not seem dramatic but when applied to a cause making up half of our claims it becomes highly significant. Similarly a trend in a cause making up only 4.3% (CABG) of all claims may not appear too worrying, but when the annual rate of increase is 14%, the number of such claims is projected to be nearly 14-fold in twenty years and accounts for over one-third of the total by the end of the projection period. Overall claims are projected to have increased by an average of 2.8% annually over the analysis period. This compares with the Irish Working Party's estimates of 0.4% for males and 0.6% for females.

If the current trends in population incidence are mirrored by CIC policies already in force, we may see a deterioration in experience of over 70% over a 20 year period.

The projected trends can be graphically shown below:-



The result of projecting the trends may be even more dramatic if allowance was made for purchase bias and the inherent unquantifiable risks within the product.

An initial report on critical illness insurance experience has been published by the Critical Illness Healthcare Study Group. Their results were more encouraging, but the data had a broad spread of different risks and was heavily weighted by mortgage related business. There is evidence that the growing proportion of mortgage business may have been a large contributor to their observed improvement in experience and that a high proportion of non-mortgage business would question the applicability of the Healthcare Group's results.

APPENDIX 2

CLAIMS CASE STUDIES

1. A South African Lesson

A consortium consisting of an independent insurance broker, two doctors, various spouses and other close family members, sought to defraud a number of insurance companies. All the syndicate members knew each other well and all had had at some stage, or currently, problems involving various combinations of alcohol, drugs and money but this obviously only came to light during the investigation.

The original plan would seem to have been to apply for an extensive number of relatively small Critical Illness policies for each of the various members of the syndicate with fraudulent medical evidence. This evidence would be in the form of either questionnaires filled in by the applicant or investigations carried out by one of the syndicate doctors. The policies would then experience early claims in respect of illnesses related to the bad health of the members which was obviously not documented at proposal stage.

This aim changed somewhere along the line and the syndicate took a conscious decision to actually create claims and back these claims up with false evidence.

The claims were created in various ways including for example the use of slightly inconclusive evidence of cancers. These include techniques such as needle aspiration that could not be unequivocally disproved despite the fact that the evidence presented was not unequivocal.

With the onus of proof on the insurance industry such moderately sized claims are seldom contested in the South African market.

In similar vein, one of the more direct ways in which claims were manufactured was where an innocent (and unrelated) patient was operated on by one of the syndicate doctors for a tumour which, as under normal practice, had a portion sent for pathology testing to establish possibly malignancy.

It would appear, although this has not been fully proven yet due to the complicated nature of DNA testing, that some of the tumour was retained by the doctor and, if it was found to be malignant, was subsequently sent in to another laboratory utilising one of the syndicate members' names as the patient.

With such evidence to corroborate a claim, suspicion would never be raised and this was indeed the case in this instance which led to many claims being paid in respect of the various people in the syndicate. As mentioned, the policies were predominantly of small cover size and spread around numerous companies; this made detection or linking together very difficult.

One way the possibility of fraud was alleged to have been discovered was by chance during a telephone call between a claims underwriter and one of the claimants, or the broker himself. Whilst the exact detail of the discovery is unclear, its detection had a lot to do with luck and nothing to do with the industry-wide policing of critical illness claims.

Suspicion was raised during the conversation due to inconsistencies and ambiguities in the respondent's answers to questions posed by the insurer. On subsequent investigation throughout the industry, a link emerged between a large number of recent claims and a single intermediary source was unearthed.

This then led to further industry-wide digging. It was found that claims in excess of R2million (£250,000) had been paid or were being considered for payment in respect of members of the syndicate. The absolute amount of this scheme may appear small but it is not as important as the fact that it was some seven times greater than the then per person maximum allowed in the market.

At the end of the day, the true reason for this fraud being unearthed was purely the age-old human problem of greed that is present in such people. Had they been more "sensible", they could conceivably have got away with the fraud over many years and nobody would have been any the wiser. This raises the question as to how many similarly fraudulent schemes are currently being perpetrated in markets all over the world.

As is often the case in such scenarios, once the facts of the case began to be unearthed the syndicate fell apart and many of the members clamoured to be the one to tell all in return for immunity. As yet it is not known whether this particular scam will come before the South African courts.

This case study is included to stress that CIC clearly needs to be managed beyond the usual policy contract, actuarial and underwriting levels associated with traditional covers. This requires or demands that an enhanced degree of diligence and perhaps detective spirit be instilled in all staff and salespeople but particularly in claims and underwriting personnel.

2. Taxi Driver

Male	
Age:	34
Sum Insured:	£230,000

Proposal

Back pain 5 years before policy commencement.

Underwriting Issues

Level of cover in relation to occupation and salary. Another Critical Illness insurance policy for £300,000 had been effected with another office but was not disclosed as aggregation clauses generally do not apply so the question was not asked.

Claim Details

Claim form - July 1997 - revealed limb tremor (mostly right sided).

Consultant Neurologist stated CT Scan negative but still diagnosed Parkinsons' Disease.

CMO recommended that confirmation be sought as to how the Consultant made a diagnosis on clinical grounds alone and why other neurological causes had been ruled out. What investigations had been done and what markers led to the diagnosis?

Copy of letter from the Senior House Officer "I think I agree with you (GP), this is a Parkinson's like disease".

Consultant Neurologist confirmed diagnosis was made on clinical grounds "his first symptoms had been in February 1996 and his right hand has become increasingly shaky. His leg muscles feel stiff. On examination he walks slowly with little arm swing and with a pronounced tremor in the right hand. His CT scan is normal, however I am able to clearly state he has Parkinson's disease".

Relevant Critical Illness Definition

"Parkinson's Disease as diagnosed before the 65th birthday of the Life Insured, by a consultant neurologist holding such an appointment at a major hospital in the UK. Only idiopathic Parkinsonism is covered. All other forms of Parkinsonism are not covered".

3. Nurse

Female	
Age:	37
Sum Insured:	£77,500

Proposal

This was completed with no adverse history.

Claim Details

Claim for a Cerebrovascular accident made one year after policy commencement. All medical reports refer to migraine, with difficulty in using her right leg.

Further evidence revealed that the claimant's husband is "medically qualified". He wrote a letter stressing her symptoms fitted the definition of a stroke.

Specialist's (Neuro Radiologist) letter received. "MRI scan suggests subcortical vascular ischaemic foci. There is a possibility of underlying vasculitis. MS was considered but dismissed".

Neurologist's report received one month later. He looked at the same MRI scan and said changes are consistent with a diagnosis of migraine. He said it was unlikely to be a cerebral vasculitis. The presumptive diagnosis is migraine.

Second neurologist's report received two weeks later. "The final diagnosis remains uncertain. She has returned to work. Her main symptoms were weakness of the right arm. When I spoke to her husband today, he said she has had further sensory involvement of the right side of her face, right arm and right leg".

Third neurologist's report received one month later. The same neurologist who completed the original report, reviewed the same MRI scan and said "areas of increased signal particularly within the frontal lobes are consistent with infarction. The final and definitive diagnosis is cerebral infarction secondary to migraine".

The insurer wrote asking the neurologist to clarify the inconsistencies in his replies. The neurologist restated his latter statement and added there was no inconsistency!

The second neurologist wrote again and said that since "no non-vascular problems have emerged since I last saw her, the final diagnosis is a cerebrovascular incident. There are still continuing signs of very mild right sided weaknesses".

Solicitors acting on behalf of the claimant then wrote requesting payment be made. The claim was admitted shortly afterwards.

Relevant Critical Illness Definition

"A cerebrovascular incident resulting in permanent neurological damage. Consequently, TIA does not give rise to any entitlement to Critical Illness Benefit".

4. Pharmacist

Female	
Age:	33
Sum Insured:	£400,000 (after AIOs)

Proposal

Salary was £21,000 and cover proposed was £500,000. This was reduced to £250,000 after financial underwriting. IRP cover of £17,500 with another office was also disclosed. Mother died of Coronary Thrombosis at age 55. Only other disclosure was 'slipped on ice' in 1995.

Claim Details

The claimant submitted a claim under MS which was backed by symptomatic evidence but with no unequivocal diagnosis. The definition required the latter and hence the claim was refuted.

The claim refutation then contested. It transpired that the claimant who lived with her sister who had MS. There was still reasonable doubt about the diagnosis so MRI tests were performed. These proved negative but it was strongly argued by the claimant's brother (a GP) and backed up by an American consultant that negative MRI scans were a feature of 10% of MS claims. The claimant's specialist consultant stated that in his professional opinion the claimant had MS. The claimant then threatened to take her case to the courts (she had already taken it to the PIA, the UK's self-regulatory body who had not yet ruled on the case) and it was felt that they would find in her favour. The claim was then paid for pragmatic reasons even though strictly speaking it was invalid.

The case was contentious because:-

- i) There was no definite diagnosis and β Interferon was refused because of this.
- ii) The sum insured requested and, arguably the level accepted, were out of line with justifiable levels, particularly as IRP of 75% of salary was already in place.
- iii) Living with a sister with MS may give an opportunity to mimic symptoms.
- iv) The family connections would be able to help support her claim.

It is interesting to consider whether the claim could have been successfully refuted if the definition included reference to supporting evidence from investigational laboratory tests.

Relevant Critical Illness Definition

Unequivocal diagnosis of Multiple Sclerosis by a consultant neurologist holding such an appointment at a major UK hospital. Continuous neurological abnormalities must have persisted for at least 6 months or there must have been at least one relapse of such abnormalities. The diagnosis must be evidenced by typical symptoms of demyelination and impairment of motor and sensory functions.

5. Dentist

Male	
Age:	56
Sum Insured:	£150,000 (after AIOs)

Proposal

Declared Inter-Costal Muscle Pain without recurrence.

Claim Details

The claimant was suffering from Dupuytren's contracture (forward curvature of one or more fingers preventing closure of the hand). He had stiffness in the fingers of his right hand, particularly first thing in the morning (for 1- 1½ hours).

The claimant had this moderate impairment to manual dexterity and has had it for 18 months. However, he can still work as a dentist on 'good days' and still acts as a dentist for family and friends. He has, however, now sold his practice.

The claimant can still play golf (with adapted clubs), garden and walk his dog.

The claimant also had IRP policies with 3 other offices which were all in payment.

Though the TPD definition was not properly satisfied in that the "total" part of the disability is not met, the claim was paid. It was felt that the court and PIA ombudsman would have ruled in favour of the claimant.

Relevant Critical Illness Definition

Total Permanent and Irreversible disability so that the Life Insured is unable to and will never again be able to perform their own occupation.

6. Haulage Contractor

Male	
Age:	54
Sum Insured:	£175,000

Proposal

Car accident four years ago. Stayed in hospital overnight for observation. "I had a stiff neck and head for a week".

Underwriting Issues

PMAR (at underwriting stage)

3 years ago - Road Traffic Accident. He was a passenger in a car and received whiplash injuries. 5 days off work and a full recovery made.

Medical Examination (at underwriting)

He looks well. He complained of having had a headache last week lasting a couple of days, from which he has recovered.

Claim Details

A claim was received on this case on 31 March 1997 (application date 1 February 1997, policy commencement date 1 March 1997, the same as the claim date!).

Claimant's Form - "I had a stroke on 1 March 1997".

GP's report - "He had a single fit on 1 March 1997. He saw me complaining of light headedness and loss of touch sensation to his face. I immediately sent him to hospital for investigations. A scan revealed a space occupying lesion in the brain. He was operated on 10/3/97 and a haematoma was found and removed. There was no apparent cause for his haematoma. His neurological signs have now disappeared.

Hospital report - "I reviewed Mr X on 21/4/97. You will recall he had a left temporal intracerebral haematoma evacuated about 4 weeks ago. Pre-operative imaging had not established a cause for that haematoma and at operation there was no evidence of a vascular lesion nor of underlying neoplasia. The histology, as you know, was somewhat uncertain. Repeat MR imaging was consistent with haematoma and surgery but has not demonstrated any other specific abnormality.

Today it is clear that he is well. He will return to work shortly. He is physically extremely well and he feels that his concentration, memory and general performance are unchanged. He does have extremely occasional minor expressive dysphasia which is persistent and certainly not progressive. He remains on phenytoin and has not had an epileptic seizure. On examination there was no neurological abnormality, specifically there was no visual field defect, no obvious dysphasia and no limb weakness.

He has obviously done extremely well. Our only remaining concern, obviously is that most patients of this age with a significant intracerebral haematoma would have a cause for that and we have failed to identify a cause in his case".

Relevant Critical Illness Definition

A cerebrovascular incident, resulting in neurological damage. TIAs are excluded.

APPENDIX 3**ILLUSTRATIVE CLAIMS COSTS FOR SURGICAL PROCEDURES (1997)**

Surgical Procedure	Claims Cost
Coronary Angioplasty	£8,000 - £10,000
Aorta Valve Surgery	£14,000 - £16,000
CABG	£12,000 - £15,000
Other Major Heart Operations	£14,000 - £16,000

Source: Supplied by a UK PMI company

APPENDIX 4

EXAMPLE OF A SOUTH AFRICAN APPROACH TO SCALED BENEFITS

Heart Attack	100%
Heart Valve Replacement	50%
Valvotomy (cutting of heart valve to relieve obstruction)	10%
Valvuloplasty (heart valve repair)	10%
Angioplasty	5%
Coronary Artery Bypass Surgery	60%
Aorta Surgery	50%
Stroke	50%
Stroke (leading to partial blindness or verbal inability or limb dysfunction)	100%
Cancer (primary malignant without metastases or Stage 1 Hodgkins)	50%
Cancer (lymph node or distant metastases, leukaemia, non Hodgkins-lymphomas or stage II, III or IV Hodgkins)	100%
Major Organ Transplant	100%
Kidney Failure	100%
Paraplegia	100%
Blindness	100%
Major Burns (third degree covering 20% of body)	50%
Major Burns (third degree covering 40% of body)	75%
Major Burns (third degree covering 60% of body)	100%
Coma (no reaction over 96 hours)	50%
Coma (after 3 months, permanent incapacitating neurological deficit)	100%
Alzheimers	100%
Multiple Sclerosis	100%
Loss of Speech	50%
Loss of Hearing	75%
Terminal Illness	100%
Accidental HIV Infection	100%

The company, on acceptance of the critical illness, pays the due proportion of the sum insured and reduces the balance available (if any) for the next incident. The maximum total critical illness payout is R400,000 (£50,000). Claims cannot be made for repeated occurrences of the same illness. Under acceleration contracts, death leads to 100% of any residual benefit being paid.

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