

# CHAPTER 6

## INTRODUCTION TO UNDERWRITING

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### Learning Outcomes

When you have completed this chapter you will be able to

- explain the need for underwriting in life insurance;
- describe the objectives of the life underwriter;
- list the different risk classes that a life underwriter will need to classify prospective life's insured into;
- explain the need for selection of risk and the process followed in doing so;
- discuss the underwriting guidelines within which the average life underwriter is expected to work;
- profile a life underwriter;
- identify the more common medical terms that are generally used in medical underwriting;
- briefly discuss the concept of reinsurance as applicable to life insurance;
- list and briefly describe the different industry bodies that have a specific role to play in the underwriting of life insurance in South Africa.

## **6.1 WHAT IS UNDERWRITING?**

### **6.1.1 DEFINITION**

Selection or underwriting in the context of a life insurance proposal is the term used to describe the consideration given to an application for insurance to determine whether or not the policy applied for should be issued.

The acceptance of an applicant for either life or health cover involves a transfer of risk from the insured to the insurance company. By purchasing a life policy, the applicant substitutes a small, certain loss - the premium - for a larger, uncertain loss - usually the beneficiary's loss of future financial support due to the early death of the life insured. In this way, the life cover transfers the risk of financial loss due to premature death of the insured individual from the policyowner or named beneficiary to the life insurance company.

The process used to determine an individual's probable degree of risk of loss is called underwriting. Life cover must be provided on an equitable basis and therefore each life insured is charged a premium rate that corresponds to the risk that the person presents to the company. Therefore someone with a higher risk of death, for life insurance purposes, and for health insurance a higher risk of accident or illness, pays a higher premium than someone with a lower risk.

### **6.1.2 THE BASIS OF SOUND UNDERWRITING**

The mortality profit made by a life insurer is relatively small when compared with the profit which can be made on the investment front. All insurers need to maintain a careful selection of lives, otherwise the expected small mortality profit could turn into an unexpectedly large loss.

The underwriting standards of all insurers are tending to become more lenient as more statistics become available and the risks of many diseases are improved as the result of modern medicine and surgery. The ever widening scope of non-medical schemes illustrates this feature and it is true to say that most life offices come within the average band.

However, while some insurers remain very stringent and selective as a definite policy, other insurers on the other hand are known, as a deliberate marketing policy, to be extremely generous on sub-standard risks. This means that these insurers tend to attract the most impaired lives.

In addition we have seen the development of professional reinsurance companies who deal only with other insurance offices. Certain of these reinsurers have, amongst other things, specialised in the insurance of sub-standard risks, enabling direct insurers to reinsure certain sub-standard risks with them.

Although the direct insurer largely loses the benefit of any profit from this form of business they manage to please good agency connections by taking sub-standard risks at attractive rates.

## 6.2 INTRODUCTION TO UNDERWRITING

One of the basic principles of life insurance is that the premium paid by each insured life is sufficient to cover the risk which he brings to the life insurance fund. In order to implement this, a mortality table is used in calculation of standard premium rates applicable to average lives, where the potential mortality risk is unlikely to be heavier than that in the mortality table.

Each risk is assessed individually by the underwriter and, if it appears that the mortality is no heavier than the mortality rate used in premium calculation, the proposal is accepted at the standard rate of premium, as the risk is average. When the proposer for insurance is a heavier mortality risk it is described as under average or sub-standard. In these circumstances standard premium rates wouldn't be allowed, therefore the proposal is accepted on special terms, declined or delayed, according to the circumstances.

There are a number of factors that influence the assessment of a risk and an underwriter must take care to ensure that each factor is carefully assessed before a decision on the acceptance of a proposer is made.

The following are the factors that influence assessment of the risk:

- the proposer's age and gender;
- the proposer's physical condition;
- the proposer's medical history;
- family medical history;
- occupation; and
- hobbies and leisure activities of a hazardous nature.

In some cases, environment, moral hazard, and the possibility of foreign residence or travel are relevant. Underwriting standards vary considerably between insurers, nevertheless all underwriting is subject to the same basic principles.

Contracts of life insurance and permanent health insurance are long term contracts. When assessing the risk the underwriter must look ahead and take into account future deterioration of the proposer's physical condition, arising from his medical history or present state of health. The risk premium is fixed at the inception of the contract and the insurer cannot increase it at renewal or refuse to accept a renewal premium if it is tendered within the days of grace allowed for payment.

Even where the issued policy is a universal policy the insurer is not permitted to re-evaluate an insured on an individual basis. The basis of a review and adjustment of premium rates as a result of increased risk factors, such as an even higher than anticipated spread of an illness, is always based on the overall portfolio of policies held by the insurer and never on an individual basis.

When assessing the risk, relevant features must not be considered in isolation but in relation to each other.

**Example**

A person with a history of chest disorders who works in a dusty atmosphere is a higher risk than a person with a similar history working in the open air. Heredity may play a part as there is sometimes a predisposition for certain illnesses to run in families or conversely for longevity to run in families.

Risks are assessed mainly on the basis of:

- mortality in life insurance;
- morbidity in permanent health insurance;
- occupation, and medical condition in personal accident insurance; and
- medical condition and medical history in hospital and major medical insurance.

There is considerable difference between mortality and morbidity from an underwriting angle.

Muscular rheumatism, for example, does not increase the sufferer's mortality rate, but it certainly increases the sufferer's morbidity rate as he is likely to be disabled from time to time. In this case normal rates would be offered for life insurance, whilst a permanent health insurance policy would not provide a benefit for at least the first 26 weeks of incapacity arising from muscular rheumatism.

## **6.3 THE OBJECTIVES OF THE UNDERWRITER**

In making underwriting decisions and assigning proposed insureds to the appropriate risk classes, the underwriter's objectives are to approve and issue a policy that is:

- equitable to the client;
- deliverable by the intermediary; and
- profitable to the company.

### **6.3.1 EQUITABLE TO THE CLIENT**

As each application for insurance is received, the insurance company must determine the degree of risk and must charge a fair premium for this risk.

Analysis of a group of individuals of a particular age and sex indicates a wide variation in physical health, occupation, hobbies and other factors. For example, in a group of one hundred 35 year old males applying for R100 000 cover, perhaps 98 are in good health and two have a serious health impairment that is likely to increase their risk of early death.

If all one hundred males paid the same premium for their insurance cover, the 98 healthy ones would be subsidising the higher risk represented by the two in poor health. Such an arrangement would not be equitable.

Therefore the men with a higher risk of early death should be charged a higher life insurance premium than the others. This principle holds true for any impairment that causes an individual to have a higher risk of loss than other individuals of the same sex and age.

An understanding of how various factors influence mortality enables the underwriter to identify applicants who present comparable mortality risks and to classify these applicants accordingly. Classifying the lives insured in this way enables the insurance company to charge each individual policyowner an equitable premium proportionate to the degree of mortality risk he presents to the company.

### 6.3.2 DELIVERABLE BY THE INTERMEDIARY

The buyer makes the ultimate decision as to whether a particular insurance policy is acceptable. If the buyer chooses not to accept the policy when the intermediary attempts to deliver it, that policy is said to be not taken up.

One of the many reasons a policy may be considered **not taken**, is because of an unfavourable underwriting decision, that results in a higher-than-anticipated premium charge. For example, if the underwriter has decided to charge a higher-than-normal premium for the cover or to limit the amount or type of supplementary benefits or riders applied for, then the applicant may reject the policy.

For a policy to be acceptable to the buyer, it must satisfy three basic requirements:

- the policy must provide benefits that meet the buyer's needs;
- the cost of the cover provided by the policy must be within the buyer's financial means; and
- the premium to be charged for the cover must be competitive in the marketplace.

The third requirement listed above is particularly important, because the life insurance industry is very competitive, especially in the area of pricing. The price that an intermediary quotes to a client, is generally based on the company's standard premium rates. The intermediary may have difficulty delivering the issued policy to a client, if the underwriter's decision has made the policy more expensive than the premium rate the intermediary originally quoted to the buyer.

When this is the case, intermediaries may exert pressure on the underwriter to lower the price. If the insurer does not yield, the intermediary may take the proposal to a competitor that offers a more deliverable decision. When intermediaries attempt to put pressure on an underwriter, and no change in the decision is possible, the underwriter must be able to explain the reasons for his decision with credibility.

### 6.3.3 PROFITABLE TO THE INSURER

An underwriter must make decisions that are profitable to the insurer. All insurance companies require sound underwriting to ensure favourable financial results. The profitability of an insurer is, to a large extent, built into the rate structure established by its actuaries.

Although underwriters are not directly involved in establishing an insurer's premium structure, underwriters decisions are very important in producing actual mortality results that coincide with the actuaries' mortality projections.

### **6.3.4 SERVICE AND SPEED**

Prompt application approval and policy delivery are vitally important. Each day that goes by, after the client has completed the application, gives the applicant an opportunity to reconsider the buying decision, even if a premium has been paid in advance.

The management systems available provide reports about overall time service patterns to company executives, so that when serious delays seem to be occurring, corrective action can be taken immediately.

Underwriters must balance the demand for prompt turnaround time with appropriate analysis of risk information.

Most laboratories have begun using electronic transmission of completed blood and urine results, and these are received by the insurer directly via an electronic link up with a particular laboratory. This service ensures that the test results remain confidential and prohibits easy access from any third party who may wish to alter the results. Confidentiality of personal information is crucial and must be adhered to at all times.

Once all the necessary data has been attained, the underwriter might find that the case is substandard, and send all the details to the reinsurance companies for their opinion. The reinsurers are also in competition with each other to provide the best possible terms for the applicant, in the shortest possible time.

A 24 hour turnaround is usually expected with the pressure of trying to reduce this as much as possible. The direct office underwriter then has to decide which reinsurer's terms he is happy to accept and generally shares the business with the reinsurer, or in some cases where the risk is highly substandard, requests that the reinsurer keeps 100% of the risk.

## **6.4 THE SELECTION OF RISKS**

### **6.4.1 ESTABLISHING RISK CLASSES**

By using available statistics on mortality, a life company actuary is able to establish a number of different categories, known as risk classes, to accommodate the varying degrees of risk presented by groups of individual applicants.

A risk class is a group of insureds who present an equivalent mortality risk to the insurance company.

The underlying concept involved in pricing an insurance product is that past mortality experience can be used to predict future mortality experience if:

- a large enough number of people apply for insurance; and

- these people can be placed within relatively homogenous groupings for the purpose of developing a premium structure.

A schedule of premium rates for life and health insurance is based on the assumption that the future mortality and morbidity rates anticipated by the actuary, and those rates actually experienced by the insurer, will generally be comparable to past mortality and morbidity rates. This assumption will generally hold true if individuals, who exhibit similar degrees of risk, are grouped together in large enough numbers for the laws of probability to operate.

The different risk classes used by life insurance companies can generally be grouped as the **standard, substandard, preferred and non-smoker classes**.

- The **standard** class includes individuals whose anticipated mortality is regarded as average.
- There are usually several **substandard** classes that include individuals with impairments, any aspect of their health, occupation, avocation or lifestyle that can be expected to shorten their lifespan.
- The **non-smoker** class uses only one factor - whether an individual smokes, usually cigarettes, to determine whether that individual is a better-than-average mortality risk.
- The **preferred** class, on the other hand, is based on many factors in addition to whether the applicant smokes.
- There may be some overlap between the preferred class and the non-smoker class. Both classes include individuals whose anticipated mortality is lower than standard mortality.

## 6.4.2 THE NEED FOR SELECTION

The selection process is necessary if we accept the principle that every life insured should contribute his fair share toward the risk involved. Only applicants who are exposed to comparable degrees of risk should be placed in the same premium class.

The fact that mortality varies with age, makes it necessary to have premiums that vary with age for a given plan of insurance. The process of selection and classification of risks is necessary to reflect the fact that individuals of the same age may be classified into groups that will give widely different mortality results. For example a person suffering from insulin dependant diabetes has a higher mortality risk than someone of the same age and gender who suffers from mild obesity.

In any group of individuals of the same age, some are exposed to greater risks of death because of occupational or hobby activities. The great majority are classed as a standard risk, as they have had some minor illnesses, or have minor physical defects, but none that affect longevity to any great extent. Those that are free from even the slightest impairment are preferred.

Knowledge of the way the various factors influence mortality enables the underwriter to classify applicants into groups that will give relative mortality rates very close to those that are anticipated. Those subject to a higher than normal mortality are said to be substandard or impaired and their chances of survival from year to year are reduced.

### 6.4.3 RISK SELECTION

Underwriting specifically considers each applicant on his unique characteristics. No two individuals are alike. The underwriter's placement of individuals into risk classes is based on many factors. Company guidelines, developed from statistics concerning these factors' effects on mortality, determine the underwriter's decision regarding the selection and classification of individual-proposed insureds.

The underwriting decision must often be objective, however, since the guidelines do not always apply to the special set of circumstances and the uniqueness of a given individual.

In addition to classifying individuals selected for insurance coverage according to the different degrees of risk they present to the insurer, underwriting helps guard against anti selection. **Anti-selection**, or selection against the insurer, is the tendency of people who have a greater than average likelihood of loss, to be interested in obtaining or continuing life or health cover to a greater extent than others.

For example, there is a tendency for some people who are in poor health, or who work in a hazardous occupation, to want to purchase life cover. Underwriters must be careful to guard against possible anti-selection, in order to ensure that all individuals accepted for cover are placed in the appropriate risk classes. This will result in those people insured being charged an equitable premium for the risk they present to the insurer.

## 6.5 UNDERWRITING GUIDELINES

One of the most important prerequisites to sound underwriting is **consistency**. Consistency is necessary for two main reasons:

- for the underwriter to achieve the mortality results projected by the actuaries; and
- for members of the company's field force, and any supporting brokers to predict to some degree the underwriting decision on individual applications, especially in cases involving impaired risks. The intermediary can then take applications from proposed insureds with realistic expectations about the probable underwriting decision.

In order to assure consistent underwriting, and to achieve the mortality results assumed in the premium calculations, underwriters follow guidelines based on the insurer's rate structure, mortality experience and financial objectives.

### 6.5.1 THE NUMERICAL RATING SYSTEM

This method of underwriting assigns numerical values to individual applicants, based on the degree of risk they present to the insurer. These numerical values are then used to determine the appropriate risk class in which to place the applicant, and the appropriate premium to charge. The numerical system works on a debit and credit system to a number of impairments that have been determined to have a greater, or a lesser, impact on the mortality risk presented by the applicant.



The underlying principle in the numerical method of medical selection rests on the assumption that the average risk accepted by an insurer has a value of 100% and that each of the factors that make up a risk shall be expressed numerically in terms of an extra mortality percentage. It is 100% certain that we will all die some day.

The total of these extras where there is more than one impairment involved, shall be determined by taking various debit or credit criteria into consideration. Allowance must be made for the interdependence of two risk factors, and whether they exacerbate the risk to a greater or lesser degree.

This method assumes that the final decision is consistent with good judgement, hence an underwriter should have a sound medical knowledge. An accumulation of credits, for example, does not necessarily mean that a substantial and important debit will be nullified. Hazards which are of a temporary nature would need to be rated with a temporary loading.

## **6.5.2 THE UNDERWRITING MANUAL**

The underwriting manual provides background information on impairments, and serves as a guide to suggested underwriting action when various impairments are present. Most insurers emphasise that the suggested actions listed in their manuals are intended to be flexible and may be modified by the underwriter according to individual circumstances.

In order to prepare an underwriting manual, extensive experience with various types of risks and impairments is needed, and therefore the reinsurers were the first to produce these manuals.

Most manuals also include a laboratory section which lists basic laboratory test data and a normal range of values for the most commonly used laboratory tests.

Indexes usually include a list of synonyms and derivative terms for impairments and corresponding page references.

### **Limitations of underwriting manuals**

Although the underwriting manual has a significant place in the underwriting function, the manual should not be used as an absolute authority for several reasons:

- when the underwriters are faced with a combination of different impairments, they must have a sound medical knowledge in order to be able to determine whether the combination of risk factors greatly increases the risk, such as smoking and cancer, as cigarettes are known to be carcinogenic. However with the combination of cancer and obesity, obesity does not have a direct impact on cancer;
- the task of keeping an underwriting manual up to date is formidable and time consuming, especially in light of the rapid pace of medical advances, and the information in such manuals is often dated and, reflects the experience from risks accepted at least five years;
- manuals generally reflect the anticipated extra mortality for ages 25 or 30 through to 55 or 60. Therefore, to assess a risk on either side of these age limits requires some modification of the manual's suggested ratings.

### 6.5.3 UNDERWRITING POLICY AND COMPANY OBJECTIVES

One company may be writing business among certain groups who carry comparatively large policies, hoping to offer cover to this sector of society on a favourable cost basis. Another company may undertake to provide insurance for all levels of society, so that as many members as possible may enjoy the benefits. One company may go for a niche market, hoping in that way to enjoy economies that more than make up for the limited growth that is possible. The underwriting policy that is adopted must be in keeping with each individual company's objectives and target market.

### 6.5.4 ASISA HIV TESTING PROTOCOL<sup>5</sup>

The original AIDS agreement was introduced as a direct result of the threat to the financial soundness of member offices of the LOA posed by HIV/AIDS. Member offices were required, in the absence of a negative HIV antibody test result, to impose an AIDS exclusion clause on all life policies of R200 000 or more.

The exclusion also applied on all disability income policies of R2 000 per month or more, and on all business overhead disability income policies of R8 000 per month or more. The rapid escalation of HIV positive numbers in South Africa necessitated a rethink of the numerical figures to be used before an HIV-test must be undergone.

Before the LOA revisited the problem some life offices had already reduced the sum insured above which an HIV-test became mandatory to as low as R50 000, while some life offices were calling for tests where the sum insured exceeded as little as R20 000.

The HIV testing protocol introduced by the LOA as a replacement to the original AIDS agreement no longer stipulates at what level an HIV-test becomes mandatory, it simply provides guidelines on the application of the tests.

What is interesting is the attitude taken by the LOA to the use of an HIV/AIDS exclusion clause. While this has long been seen to be discouraged, in 2007 the LOA members agreed that they would no longer enforce such clauses on life and lump sum disability cases, even under those policies which had already been issued with an HIV/AIDS exclusion.

The reasons for this, apart from the humanitarian and marketing undertones, lie in the difficulty in getting the true cause of death disclosed on death certificates, where the HI virus may be involved. They also lie in advances in the use of anti-retroviral (ARV) treatment, to prolong the lifespan of those who are infected. This makes the disease treatable, in a similar way to other chronic conditions such as diabetes, according to some commentators.

This is more than likely only applicable to policies with relatively low life cover as an insurer would be inclined to decline acceptance of a proposal with a large sum insured, if the proposer refuses to undergo an HIV-test.

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<sup>5</sup> In December 2008, the LOA merged with other investment-product providers and managers to become the Association of Savings and Investments South Africa (ASISA)

Many life offices avoid having to deal with an AIDS exclusion clause, by simply insisting on an HIV-test with all policies providing life or disability cover. The reasoning behind this thinking is as a result of the following:

- policies providing life cover that will only be issued after a negative HIV-test result has been produced will remain in force if the insured should become infected with the HI Virus after the inception of the policy. It is only where periodic HIV-tests are required as a continued guarantee of cover, that the life cover on the policy might be reduced if a positive HIV-test is submitted by the life insured<sup>6</sup>;
- an insurance company will be able to refuse payment, only where it can be shown that there was a **material non-disclosure** in relation to HIV status before the policy was issued<sup>7</sup>. In these instances, the insurer would never have been at risk anyway, because the policy would not have been issued, or only issued on special terms, if the insurer had been informed of the actual state of health of the proposed life insured;
- AIDS is very seldom, stated on a death certificate as the cause of death. This would, therefore, make it very difficult to enforce an AIDS exclusion clause. The insurer may elect to rely on the World Health Organisation's (WHO) list on AIDS related conditions, but this is one step removed, and will make the AIDS exclusion clause difficult to enforce.

Whatever the approach of the insurer, it must subscribe to a testing protocol that ensures that test results are treated in a confidential and sensitive manner. In particular, positive test results must not be divulged to any person, other than the doctor nominated by the proposer. All positive test results and all refusals to undergo a test must also be recorded in the ASISA's life registry.

Where an HIV antibody test is performed and the result comes back as a negative, the proposer must be informed of this fact if the proposal is declined for any reason unconnected with HIV/AIDS.

A niche long term player has actually announced a specific life plan for HIV positive people.

This protocol is still in force through ASISA.

## 6.6 PROFILE OF AN UNDERWRITER

The underwriting team could be said to include the intermediary, the medical examiner, the lay underwriter and even the actuary for the bases on which the underwriting is done.

For the actual evaluation process, the co-operation of a medical advisor is valuable, in as much as the probable length of life of a human being depends to a large extent on medical factors, such as:

- past illnesses;

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<sup>6</sup> Periodic HIV-testing is a marketing tool used by certain companies to reduce the initial premium to be levied on a life policy with a high initial sum insured.

<sup>7</sup> This will be true for any illness or disability that existed before inception of the policy, but which was not disclosed to the insurer.

- state of nutrition;
- mode of living; and
- general state of health.

An underwriter without medical knowledge cannot adequately assess, even with good guidelines, all probabilities of death and survival associated with a number of diseases or other abnormalities.

It is, in effect, the duty of the underwriter to perform all those functions involved in the underwriting process, for which the doctor's specialist knowledge is not absolutely essential.

### 6.6.1 FUNCTIONS OF THE EXPERIENCED UNDERWRITER

An underwriter must have a well-founded store of knowledge on the technical, legal and medical basis of life insurance, and be thoroughly familiar with the objectives of underwriting and the company's administrative procedures.

The general function of an underwriter includes:

- the continuous acquisition, evaluation and indexing of information from various publications which could be of underwriting significance;
- the formulation and, where necessary, amendment of underwriting rules and the consistent enforcement of these;
- the design and/or adaptation of application forms and other documents relating to ascertaining the applicant's state of health;
- the processing and examination of individual applications for insurance in order to arrive at a sound underwriting decision;
- the establishment and maintenance of close contact with company management, agency staff and the claims and actuarial departments.

Since underwriting is constantly changing, the underwriter must ensure that he is adequately informed regarding any new developments and tendencies within the field. Changes may occur in many different areas such as:

- **medicine:** increasing importance of new kinds of medical treatment and advances in operative techniques, for example, hip replacement prostheses;
- **epidemiology:** the diminishing importance of communicable diseases such as diphtheria and the increasing importance of new diseases;
- **technological advances:** dangers of atomic energy, new technologies in racing or diving;
- **travel:** the ever growing number of aviation and road traffic accidents;
- **legislation:** changes in taxation laws may increase or decrease the demand for life insurance or make certain types of cover more attractive;

- **economics:** during times of recession, care should be taken in the underwriting of disability benefits. The insured population may be more tempted to claim on their benefits when they are feeling the economic squeeze;
- **political situation:** crime has a direct impact on claims experience for traumatic deaths and on disability claims for, post traumatic stress disorder. The underwriter must bear this in mind when underwriting certain occupations, such as policemen and taxi drivers who are exposed to violence;
- **marketing situation:** new types of policies and benefits may be developed and these may in turn involve new underwriting criteria and considerations.

In order to keep abreast of such developments in these various fields, the underwriter must do a great deal of purposeful reading including insurance journals, suitable publications from the World Health Organisation, and medical journals.

In order to ensure that information is not only acquired but that it also is available when needed, a simple but efficient system of collecting, summarising, classifying and indexing the relevant information should be developed.

Frequent discussions with the medical advisor and other professional colleagues, will further broaden the underwriter's horizon. It will also provide an indispensable asset for the underwriter in terms of information, who often is obliged to maintain authority under pressure.

Establishing and consistently enforcing reasonable and purposeful underwriting rules, and adapting them periodically to changing circumstances, is an important duty of the underwriter. This includes:

- age limits, as well as amount limits for medical and non medical acceptance;
- rules setting out how applications must be completed;
- the choice of medical examiners;
- rules for obtaining Personal Medical Attendant reports; and
- rules for dealing with applications for reinstatement of lapsed policies. These rules are essential for effective administration.

While even the best rules will not in themselves prevent anti-selection, the knowledge that such rules exist and must be complied with, is a constant reminder to the intermediaries that the company means to exercise control over the quality of its new business.

## **Design of Application Forms**

The design of application forms and other forms used in underwriting is closely linked to the need for good underwriting rules. The underwriter must develop the ability to draft forms and questionnaires that are simply worded, well arranged and sufficiently comprehensive to elicit the essential underwriting data from an honest applicant.

The design of good forms is a skill which presupposes a thorough knowledge of the subject matter, good judgement, a sense of balance and some experience. Forms, such as the medical examination form, should only be designed in conjunction with the medical advisor.

In certain cases, it is essential that the company's legal advisor be consulted, or that he drafts certain sections of a form, for example the declarations or warranties. Specimen forms found in books or journals can be used for reference, but never copied, because no specimen form designed by someone outside a company, can fully meet that company's individual needs.

Processing of application forms involves a large number of duties which underwriters need not necessarily perform personally, but with which they should be thoroughly familiar. This is because some of the data being processed may also have underwriting significance. Underwriters must satisfy themselves that the company's underwriting rules have been met.

He needs to:

- take note of the introducing intermediary and examining doctor, in cases where medical examinations were carried out;
- compare the relevant signatures;
- take note of the plan of insurance requested;
- take note of the sum insured;
- pay attention to the reasons for the cover, and the insurable interest; and
- carefully evaluate the medical factors, including occupation, sporting activities, as well as amounts of existing cover.

Underwriters should be able to determine whether the applicant is a first class risk or substandard, or even uninsurable. They should also be able to prepare all files that must be reviewed by their seniors or the medical advisor, so that the senior underwriter can devote his time and knowledge to examining the concerning aspects of the risk.

## **6.6.2 QUERIES**

Many queries arise in the daily work of an underwriting department. Applications are often incomplete, additional information may be necessary, and there may be inconsistencies requiring clarification. Such queries necessitate much correspondence which must be conducted with competence and skill, and in such a manner that there is no avoidable delay or loss of business.

Underwriters should, therefore, know how to conduct correspondence, telephone and other conversations, and generally secure the efficient and prompt cooperation of those from whom information is required.

The importance of correctly assembled, and intelligently sifted, underwriting information can hardly be overstated. No item of information should be ignored, but it is the underwriters prerogative to decide the importance that should be attached to each item of information.

It may happen, for example, that in the case of a known hypertensive applicant, a medical report is submitted which shows normal blood pressure readings. It is the underwriters responsibility to decide what weight should be attached to the information, in relation to the overall picture of that particular risk.

The progress of medical science has resulted in many previously uninsurable risks becoming insurable with loadings. More favourable underwriting decisions have become possible in respect of certain impairments. For some companies, such changes of underwriting practice may be possible only in collaboration with a reinsurer. There is, however, no doubt that a slow, but progressive, improvement of underwriting standards is possible for every company.

The alertness, speed and efficiency of a company's underwriting service can be a valuable asset in assisting to implement a company's new business expansion. The better that the underwriters are able and willing to explain the principles that guide them in their work, the better the image of the underwriting department will be within that company.

### 6.6.3 RELATIONSHIP WITH CLAIMS DEPARTMENT

A special relationship with the claims department may be very beneficial to the underwriter.

It is important that the insurer follow a consistent policy, and practice in the handling of claims. An insurer that neglects proper claims investigation, or is afraid to refuse bad claims, cannot hope to be successful in its underwriting.

Many members of the public will not bother to make true and complete declarations, if they have reason to think that there will be no penalty for non-disclosure or misrepresentation. It, therefore, stands to reason that underwriters are interested in the company's policy of, and practice in, handling claims. The underwriter also often gains valuable knowledge from a study of claims documents. The study of these documents may illuminate some weakness in the underwriting procedure, or decision that can be remedied for future business.

## 6.7 MEDICAL TERMS

Underwriters must be familiar with medical terms, so that they are aware of their significance in relation to the risk which has to be assessed. Since many medical terms are derived from Latin or Greek, their approximate meaning should be apparent to anyone who has a basic knowledge of a few prefixes and suffixes together with the medical synonyms for various parts of the human body. The following lists may help in the understanding of some of the terms encountered.

PREFIX		PART OF BODY		SUFFIX	
a- or an-	without	aden	gland	-aemia	blood
anti-	against	arteri(a)	artery	-algia	pain
brachy-	short	cardi(a)	heart	-asm	condition
brady-	slow	cephal(e)	head	-cele	tumour
dys-	difficult	cerebr(um)	brain	-ectomy	removal
ecto-	outer	chole	bile	-esis	state
endo-	within	derma	skin	-ism	condition
hydro-	water	enter(a)	intestines	-itis	inflammation
hyper-	excess	gast(e)r	stomach	-mania	madness
hypo-	deficiency	haem(a)	blood	-oma	tumour

PREFIX		PART OF BODY		SUFFIX	
leuco-	white	hepa(r)	liver	-osis	disease
melan-	black	myo(s)	muscle	-otomy	opening
meta-	change	nephr(os)	kidney	-philia	affinity
pan-	all	neur(on)	nerve	-phobia	fear
peri-	around	os	bone	-rhea	flow
poly-	excess	ot(os)	ear	-sepsis	putrefaction
scler-	hard	phleb(os)	vein	-troph	stimulating
steno-	contracted	vas	blood vessel	-uria	urine
tachy-	rapid	pulmo	lung		
		ren	kidney		



Some **examples** of compound words obtained from the above list are:

- endocarditis - inflammation within the heart;
- dermatitis - inflammation of the skin;
- nephrectomy - removal of the kidney;
- adenoma - tumour of a gland;
- myalgia - muscle pain.

## 6.8 REINSURANCE

Reinsurance is an arrangement, usually with a reinsurance company, in terms of which a portion, or all, of the risk on the life of a person, so the risk of that person dying, is passed on to the reinsurance company, in return for which an appropriate premium is paid.

Reinsurance is, a separate contract of insurance between two insurers. One, the **first or direct insurer**, has an insurable interest in the life insured. This is the obligation it has to pay the sum insured if the insured event occurs. The other insurer, usually called the **reinsurer**, in turn accepts all or part of the risk.

The main reasons for reinsurance are:

- protection against large losses which may be unaffordable, or at least highly unattractive;
- stabilisation of financial results through the reduction of fluctuations in claims;
- protection against an accumulation of claims from one source, or a series of related sources;



- to assist with the financing of new business strain;
- to allow the pooling of certain classes of risk from around the market, which may allow such risks to be more favourably underwritten than if they were left to the individual direct insurers; and
- other specialist services offered by the reinsurers.

If a life insured, with a very large life policy, and dies in the first year or two of the policy's existence, the insurance company would have to pay out a considerable sum of money. This could disrupt the financial planning and projections of the insurer.

While it is true that if the life insured lived longer than expected the life company would stand to make a considerable profit thereby, prudent financial control dictates that the life company should offset or reduce the large initial risk involved.

### 6.8.1 RETENTION

The amount at risk on any one life which a company, decides to carry itself is known as its **retention**. There is no hard and fast rule for calculating retention, but it is generally related to the capital structure of the company, the adequacy of its reserves and the average sum insured on each life which is covered.

In the early years of a life company the expenditure associated with its establishment and promotion is likely to be considerable. A newly established life company will, therefore, seek to reinsure a greater proportion of the risk carried than in the case of longer established companies.

In the early stages of its existence, the number of lives insured is likely to be small, and the actual number of deaths occurring is unlikely to correspond with those expected to occur. Reinsurance therefore assists in offsetting this risk.

The costs of acquiring new business are high, in many cases up to 135% times the first year's premium. The capital of the company is required to finance this deficit, which is known as the **New Business Strain**.

In the case of non-medical business, where the life to be insured is not subject to careful medical investigation, the mortality is likely to be higher than in the case of selected lives. There will be a tendency to over-reinsure rather than to under-reinsure.

A typical example of the amount to be retained, per life in the case of a new life company with capital of R100 million, would be of the order of R1 000 000. This amount would increase from time to time, as the company expands. It is also possible to have different levels of retention for different ages of life insured and/or according to the type of policy issued.

#### Limit of retention

Most life offices observe what is known as a **limit of retention**, that is, they retain the whole of the risk in any particular case up to an amount, which is their limit of retention. Any sum over this is reinsured with another office or reinsurer.

The student must note that **the whole risk is accepted by the original office**, and the contract which the insured has completed, is with the original office. However, that portion of the insurance **above** the office's limit of retention, is reinsured with another reinsurer.



An **example** will make this clear.

Suppose the limit of retention in a particular office is R200 000. A proposal is received for R300 000 and is accepted by the office. The balance of R100 000 is then reinsured with another reinsurer.

The reinsurance contract is between the two offices, and the insured's contract is with the first office only. He is not a party to the reinsurance and, usually is not even aware of it. The retention may also be reduced for certain classes of insurance, for advanced ages at entry and for sub-standard risks.

## 6.8.2 MAIN TYPES OF REINSURANCE

### Treaty reinsurance

In terms of such an arrangement, or treaty, made between the reinsurance company and the life company, the reinsurer agrees to accept, and the company agrees to cede, all amounts in excess of a certain retention limit. This retention limit is decided upon at the time of negotiating the treaty. Remember that the amounts at risk on **previous policies** on a particular life insured, will also be taken into account in determining the retention in a particular case. The life company is concerned with the amount it may have to pay out per **life insured**, and not **per policy**.

The advantage of a treaty is that a life company will be secure in the knowledge that its reinsurance requirements are provided for, and the associated administration in connection with the reinsurance procedure is reduced. The life office develops a more intimate relationship with its treaty reinsurer, and is able to benefit from other services offered by the reinsurer.

### Facultative reinsurance

We have seen that under a treaty arrangement the life company is obliged to cede (reinsure) all of its business falling under the reinsurance arrangement with a particular reinsurer and the reinsurer is obliged to accept such business.

The life company may be unwilling to tie itself to such an arrangement and prefer to arrange its reinsurance requirements on a policy by policy basis. In this event there is no automatic cover provided by the reinsurer, and the life company submits details of each particular policy, including medical evidence, to a reinsurer of its choice.

Terms for the reinsurance of the particular policy are then agreed upon, such as premium and commission, and the reinsurance comes into effect. This method is the exception rather than the rule, chiefly because of the greater administration involved.

## QUESTIONS ON CHAPTER 6

### Mental revision questions

*Work through these mental revision questions as a test of your understanding of this chapter. We suggest that you attempt these before tackling the written questions. Please note that suggested answers are not provided as the chapter's text contains the answers.*

1. Define the basis of sound underwriting.
2. List the different basis on which risk is assessed.
3. What are the objectives of the underwriter?
4. Why is competition an important factor that must be considered by an underwriter?
5. Why should the claims and underwriting departments work closely together?
6. What are the two main types of reinsurance arrangement?

### Written questions

*Attempt these questions after you have completed this chapter and its mental revision questions. Suggested answers to these questions are at the end of this book.*

1. Provide a brief history of the development of underwriting.
2. Why should the insurer's underwriting manual not be used as an absolute authority?
3. Define the functions of an experienced underwriter.
4. Below are some of the medical terms that an underwriter will meet in his career. Provide the common meaning of each.

PREFIX		PART OF BODY		SUFFIX	
anti-		aden		-aemia	
brachy-		cardi(a)		-asm	
dys-		cerebr(um)		-cele	
endo-		derma		-ectomy	
hydro-		gast(e)r		-mania	
melan-		haem(a)		-oma	
peri-		os		-philia	
tachy-		pulmo		-sepsis	
scler-		phleb(os)		-troph	
steno-		vas		-uria	