LEARNER GUIDE

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Investigate ways of managing Financial Risk in own lives

Introduction

Welcome to this module. The typical scope of this module is

- Describe factors that contribute to financial risk in own life.
- Explain the individual's liabilities and duties with regard to service contracts and the use of utilities.
- Investigate short term insurance as a means of reducing financial risk in own life.
- Investigate ways to reduce risk associated with accidents and medical conditions.
- Explain the financial consequences of contravening the law

Risk can be described as 'the danger (or uncertainty) of injury, damage or loss'. In a financial services environment, *risk* refers to the uncertainty of achieving the expected rate of return on an investment, or of suffering a physical or financial loss – quantified in terms of the probability of these outcomes.

The short-term insurance sub-sector addresses the risk of damage to, or loss of physical assets, and the financial consequences. However, insured parties cannot gain from short-term insurance contracts, which only indemnify them against loss. Investors may gain (more than they expect) from risky investments, but they may also suffer a serious loss, perhaps even losing their capital. (Substantial gains or losses are most likely in high-risk investments.)

Module 1

Factors that contribute to financial risk in own life

This Module deals with:

- Unplanned events that expose an individual to risk with reference to economic, social, political, environmental and other events in South Africa and an indication of the risks that could be controlled through careful financial planning.
- The basic elements of a contract with reference to three different personal contracts and an indication of the consequences of not honouring each contract.
- The small print clauses in three personal contracts and an indication of the implications of the clauses for the individual and the associated financial risk.
- The concepts of absolute and collateral cession with reference to how the two types impact on financial risk.
- The concept of surety ship with reference to how this can impact on personal liability and therefore on financial risk.

1.1 Unplanned events that expose an individual to risk with reference to economic, social, political, environmental and other events in South Africa and an indication of the risks that could be controlled through careful financial planning

1.1.1 Risk or return trade-off

The objective of an investor is to obtain the largest possible rate of return without placing invested funds at more risk than the investor can bear. The investor's reluctance to assume risk limits his or her ability to maximize returns. Remember: The aim is to maximize return and minimize risk. However, the higher the return, the greater the risk. Investors must therefore find and optimal balance, or trade-off, between high returns and low risk.

We can also call the risk or return trade-off 'the ability-to-sleep-at-night test'. While some people can handle the financial equivalent of cliff climbing without batting an eye, others are terrified of climbing the financial ladder without a secure harness. Risk implies that you may lose some or even all of your original investment. Investors should decide how much risk they can take on to remain comfortable with their investments.

Low levels of uncertainty (low risk) are associated with low potential returns. High levels of uncertainty (high risk) are associated with high potential returns. The risk or return trade-off is the balance between the desire for the lowest possible risk and the highest possible return. This principle is demonstrated graphically in Figure 1. In an investment context, risk increases with the chance that the actual return on an investment will be different from the expected. Standard deviation is a measure of this difference.

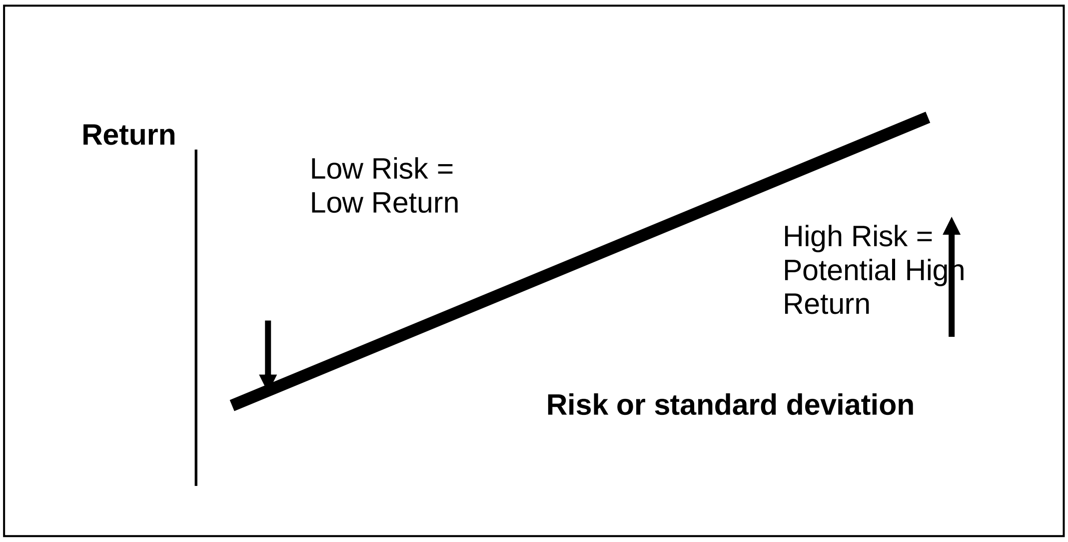


Fig. 1 ***the risk or return trade-off***

High–return investments require that you risk your principal, that is, you could lose all the money that you invest. Most people are averse to risk. We call this risk aversion. For instance, when you buy a publicly traded stock, you can lose your entire investment. If you are risk averse, you will avoid such a high level of risk. However, you will have to sacrifice some returns. If you don't invest in the stock market during certain periods, you may sacrifice huge profits. (This is also called profit aversion.) Can you see that being totally risk averse is not a good investment strategy? At the other end of the scale, being totally risk tolerant is a very high-risk strategy. A common approach to evaluating the risk associated with an asset involves estimating:

- the pessimistic (worst);
- the most likely (expected); and
- the optimistic (best) return, associated with a given asset.

If you take a group of investments and plot the estimated risk against the return, return usually increases with risk. Take another look at Figure 1.

An investor might tell you that he or she expects the investment to yield a rate of return of 10%. However, this is the investor's most likely estimate. Pressed further the investor would probably acknowledge that the estimated rate of return is uncertain. He or she would probably also admit that it is possible that the annual rate of return on this investment might go as low as – 10% or as high as 25% under certain conditions. The admission that there might be a large range of possible returns on an investment reflects the investor's uncertainty regarding the actual rate of return.

A larger range of expected returns makes an investment riskier. You can determine how likely the expected rate of return on an investment is by analysing estimates of expected returns. To do this, you assign probability values to all possible returns.

We often estimate risk in business decisions by using a distribution of outcomes such as a normal distribution. The aim of estimating risk is to minimize (or at least take account of) risk as measured by the standard deviation from the mean (average) outcome within the normal distribution. What is a normal distribution? Normal distributions are a very important class of statistical distributions. All normal distributions are symmetric and have bell-shaped density curves with a single peak.

Figure 2 will help you to understand this concept. The bell-shaped curve represents a normal distribution with a mean u and standard deviations from the mean marked -1, +1 and so on. What does the standard deviation tell us? If a share price has a mean of 15 and a standard deviation of 5 it means that most historical prices occurred between 10 and 20 (the mean plus or minuses the standard deviation)

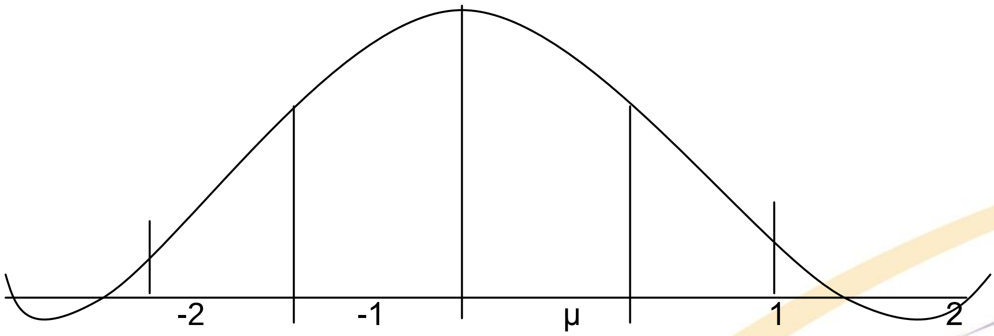


Fig. 2 ***a normal distribution (a bell-shaped curve)***

We can divide financial instruments into the following broad categories:

- Fixed-income investments, including bonds and preferred stocks;
- equity investments; and
- special equity instruments such as warrants and options.

A broad range of factors influences the price of securities issued by for example, companies (stocks), and government agencies or municipalities (bonds). These factors include the following:

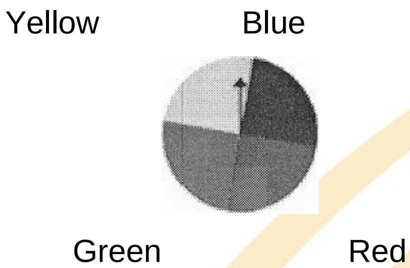
- Financial fundamentals - fluctuations in profits, earnings and cash flow affect security prices.
- Market psychology - perceptions often influence the markets as much as reality. Optimism leads prices higher, while uncertainty and negativism can cause a decline in a sector or the entire market.
- Economic factors - economic indicators (for example, gross domestic product, employment, inflation), housing statistics, oil prices and industry-specific factors all affect investors.
- Major events - acquisitions, product innovations, corporate scandals, natural disasters and political changes can have a major influence on a company, industry or entire market.

On average, bonds tend to be less volatile than stocks but bonds may also experience price variations from year to year. Factors that affect bond and equity prices include changing interest rates, shifting supply and demand dynamics and the level of perceived risk in the stock market. You can ask yourself the following question to help you determine the level of risk associated with a financial instrument - which factors will reduce earnings and the subsequent pay-off potential of the issuing company, forcing them to default on the payment obligations?

1.1.2 Probability

We'll explain the concept of probability using historical examples.

Probability: We can define probability as a measure of the likelihood that an event in the future will actually happen. Let's look at an experiment. A spinning wheel has four equal sectors, yellow, blue, green and red. What are the chances that the wheel will stop on blue after being spun? What are the chances of the wheel stopping on red?



The chances of stopping on blue are 1 in 4, or one fourth.

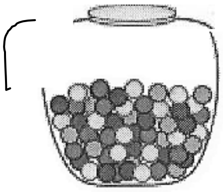
The chances of stopping on red are 1 in 4, or one fourth.

The chances of stopping on yellow are 1 in 4, or one fourth.

The chances of stopping on green are 1 in 4, or one fourth.

In the experiment, the probability of each outcome is always the same, that is, the outcomes are all equally likely to occur. Let's now look at an experiment in which the outcomes are not equally likely to occur.

A glass jar contains six red, five green, eight blue and three yellow marbles. You have to choose a single marble from the jar. What is the probability that you will choose a red marble, a green marble, a blue marble or a yellow marble?



We can calculate the probability as follows:

P (red)	=	$\frac{\text{Number of red marbles}}{\text{Total number of marbles}}$	=	$\frac{6}{22}$	$\frac{3}{11}$
P (green)	=	$\frac{\text{Number of green marbles}}{\text{Total number of marbles}}$	=	$\frac{5}{22}$	
P (blue)	=	$\frac{\text{Number of blue marbles}}{\text{Total number of marbles}}$	=	$\frac{8}{22}$	$\frac{4}{11}$
P (yellow)	=	$\frac{\text{Number of yellow marbles}}{\text{Total number of marbles}}$	=	$\frac{3}{22}$	

The outcomes in this experiment are not equally likely to occur. You are more likely to choose a blue marble than any other colour. You are least likely to choose a yellow marble.

In the next experiment you must choose a number at random from one to five. What is the probability of each outcome? What is the probability that the number chosen is even? What is the probability that the number chosen is odd? We can calculate the probability as follows:

P (1)	=	<u>Chances of choosing 1</u> Total number of numbers	=	<u>1</u> 5
P (2)	=	<u>Chances of choosing 2</u> Total number of numbers	=	<u>1</u> 5
P (3)	=	<u>Chances of choosing 3</u> Total number of numbers	=	<u>1</u> 5
P (4)	=	<u>Chances of choosing 4</u> Total number of numbers	=	<u>1</u> 5
P (5)	=	<u>Chances of choosing 5</u> Total number of numbers	=	<u>1</u> 5
P (even)	=	<u>Chances of choosing an even number</u> Total number of numbers	=	<u>2</u> 5
P (odd)	=	<u>Chances of choosing an odd number</u> <u>Total number of numbers</u>	=	<u>3</u> 5

The chances that you might choose 1,2,3,4 or 5 are equally likely. However, the probability that you mig4t choose even numbers is not the same as the probability that you might choose odd numbers, since there are three odd numbers and only two even numbers from one to five. Now look at the following three methods of measuring probability:

A priori (using logic) - we can express the probability of rolling a two with a six-sided dice as

1 ÷ 6 = 0,17

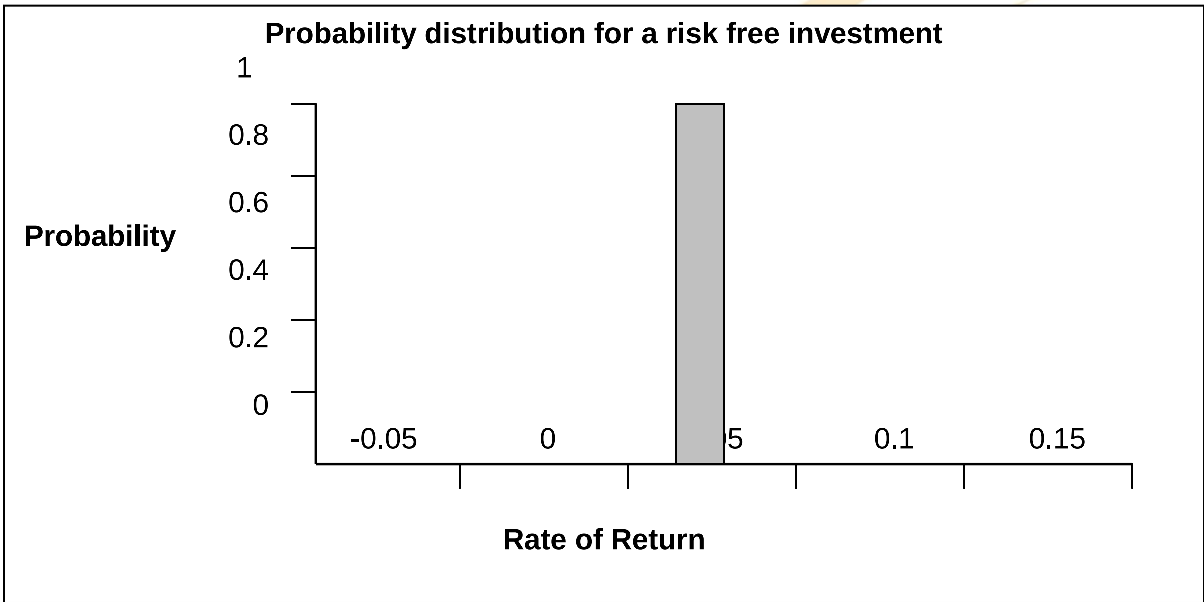
Empirically (by observing) - if 1 in 100 items produced by a machine is known to be defective, the probability that a randomly selected item will be defective is expressed as

1 ÷100 = 0,01

Subjectively (using judgement) - in many cases, managers must use their experience to judge a likely outcome. For example, if we do this, there is a 0,3 probability that we will produce a similar product within 12 months.

Probability values may range from 0 to 1. If the value is 0, there is zero probability that a particular investment will yield the estimated return. If the value is 1, there is complete certainty that the investment will yield the estimated rate of return.

These probabilities are typically subjective estimates based on the historical performance of the investment or similar investments, and modified by the investor's expectations for the future. For example, you may know that about. 30% of the time the rate of return on this particular investment has been 10%. Using this information, along with future expectations regarding the economy, you can derive an estimate of what might happen in the future. We can analyse the effect of risk by means of an example where the investor is absolutely certain of a 5% return. Figure 3 below illustrates this scenario.



Few investments provide returns that are perfectly certain. Perfect certainty allows only one possible return. The probability of receiving that return is 1. You can also calculate several rates *of return* depending on different possible economic conditions. Let's look at an example. In a strong economic environment with high corporate profits and little or no inflation, the investor might expect the rate of return on common stocks during the next year to be as high as 20%. In contrast, if there is an economic decline with a higher-than average rate of inflation, the investor might expect the rate of return on common stocks during the next year to be - 20%. With no major change in the economic environment, the rate of return during the next year would probably approach the long-run average of 10%.

1.1.3 Risk Exposure

A problem when you have a number of possible risks is that it can be difficult to decide which risks are worth putting effort into addressing. Risk Exposure is a simple calculation that gives a numeric value to a risk, enabling different risks to be compared.
Risk Exposure of any given risk = Probability of risk occurring x total loss if risk occurs
A limitation of this calculation is that it will give the same scores to high-probability/low loss risks and low-probability/high loss risks. If you are concerned with these differences, a Risk Matrix may be a better way of evaluating risks.
Risk analysis consists out of a few steps. They are as follows.

- **Risk Identification**

Risk identification sets out to identify an organisation's exposure to uncertainty. This requires an intimate knowledge of the organisation, the market in which it operates, the legal, social, political and cultural environment in which it exists, as well as the development of a sound understanding of its strategic and operational objectives, including factors critical to its success and the threats and opportunities related to the achievement of these objectives.
Strategic - These concern the long-term strategic objectives of the organisation. They can be affected by such areas as capital availability, sovereign and political risks, legal and regulatory changes, reputation and changes in the physical environment.
Operational - These concern the day-to-day issues that the organisation is confronted with as it strives to deliver its strategic objectives.
Financial - These concern the effective management and control of the finances of the organisation and the effects of external factors such as availability of credit, foreign exchange rates, interest rate movement and other market exposures.
Knowledge management - These concern the effective management and control of the knowledge resources, the production, protection and communication thereof. External factors might include the unauthorised use or abuse of intellectual property, area power failures, and competitive technology. Internal factors might be system malfunction or loss of key staff.
Compliance - These concern such issues as health & safety, environmental, trade descriptions, consumer protection, data protection, employment practices and regulatory issues.

- **Risk Description**

The objective of risk description is to display the identified risks in a structured format, for example, by using a table. The risk description table overleaf can be used to facilitate the description and assessment of risks. The use of a well-designed structure is necessary to ensure a comprehensive risk identification, description and assessment process. By considering the consequence and probability of each of the risks set out in the table, it should be possible to prioritise the key risks that need to be analysed in more detail.

High	Financial impact on the organisation is likely to exceed Rx Significant impact on the organisation's strategy or operational activities Significant stakeholder concern
Medium	Financial impact on the organisation likely to be between Rx and Ry Moderate impact on the organisation's strategy or operational activities Moderate stakeholder concern
Low	Financial impact on the organisation likely to be less that Ry Low impact on the organisation's strategy or operational activities Low stakeholder concern

Estimation	Description	Indicators
High (Probable)	Likely to occur each year or more than 25% chance of occurrence.	Potential of it occurring several times within the time period (for example - ten years). Has occurred recently.
Medium (Possible)	Likely to occur in a ten year time period or less than 25% chance of occurrence.	Could occur more than once within the time period (for example - ten years). Could be difficult to control due to some external influences. Is there a history of occurrence?
Low (Remote)	Not likely to occur in a ten year period or less than 2% chance of occurrence.	Has not occurred. Unlikely to occur.

Estimation	Description	Indicators
High (Probable)	Favourable outcome is likely to be achieved in one year or better than 75% chance of occurrence	Clear opportunity which can be relied on with reasonable certainty, to be achieved in the short term based on current management processes

Medium (Possible)	Reasonable prospects of favourable results in one year of 25% to 75% chance of occurrence.	Opportunities which may be achievable but which require careful management. Opportunities which may arise over and above the plan.
Low (Remote)	Some chance of favourable outcome in the medium term or less than 25% chance of occurrence.	Possible opportunity which has yet to be fully investigated by management. Opportunity for which the likelihood of success is low on the basis of management resources currently being applied

1.1.4 Risk Evaluation

When the risk analysis process has been completed, it is necessary to compare the estimated risks against risk criteria which the organisation has established. The risk criteria may include associated costs and benefits, legal requirements, socio-economic and environmental factors, concerns of stakeholders, etc. Risk evaluation therefore, is used to make decisions about the significance of risks to the organisation and whether each specific risk should be accepted or treated.

1.1.5 Risk Treatment

Risk treatment is the process of selecting and implementing measures to modify the risk. Risk treatment includes as its major element, risk control/mitigation, but extends further to, for example, risk avoidance, risk transfer, risk financing, etc.

NOTE: In this standard, risk financing refers to the mechanisms (e.g. insurance programmes) for funding the financial consequences of risk.

Risk financing is not generally considered to be the provision of funds to meet the cost of implementing risk treatment. Effectiveness of internal control is the degree to which the risk will either be eliminated or reduced by the proposed control measures.

One method of obtaining financial protection against the impact of risks is through risk financing which includes insurance. However, it should be recognised that some losses or elements of a loss will be uninsurable e.g. the uninsured costs associated with work-related health, safety or environmental incidents, which may include damage to employee morale and the organisation’s reputation.

The risks that need to be addressed in the individuals life is dependent on the life stage the individual is in. As a newly employed Single just starting a career, the basic risks are as follows:

- Risk of not being able to pay debt
- Risk of becoming sick

- Risk of being unable to earn an income

In the next life stage, living together, the individual is now earning more income but also has more financial responsibilities. Risks are as follows:

- Risk of not being able to pay debt
- Risk of becoming sick
- Risk of being unable to earn an income
- Risk of dying and your partner losing your income

The Family life stage. Risks are as follows:

- Risk of not being able to pay debt
- Risk of becoming sick
- Risk of being unable to earn an income
- Risk of dying and your partner losing your income
- Risk of not being able to pay for education

Mature Stage

- Risk of becoming sick
- Risk of being unable to earn an income
- Risk of living too long and not having enough money

1.1.6 Risk management

The definition of risk: An undesirable future event. It is also uncertain whether it will occur, which actually includes all future events. There are several types of risks you can consider, including:

- Things that is likely to happen.
- Things that will have a big impact, should they happen.
- Things outside of your control. So you just have to manage your way around them.
- Things you know very little about, including not knowing how likely they are to occur (in this case, you can only use the potential impact of the risk as a guide to whether prior action is of value).

Risk management includes:

- *Risk identification*: Identifying potential risks and prioritizing them for action. This means sorting out the risks that are worthy of up-front action on reduction, contingencies and/or monitoring from those that you will 'manage on the fly' (i.e. you won't bother with them until they hit you in the face).

For example using Risk Exposure or a Risk Matrix.

- *Risk reduction*: Acting to reduce the probability of targeted risks occurring and/or the impact, should they happen. (If you're lucky, you'll be able to eliminate the risk altogether, or possibly reduce it to a 'manage on the fly' risk.
- *Contingency planning*: Where you cannot reduce risks to 'manage on the fly' status, you may want to prepare people, equipment, actions and processes to 'put on the shelf' in case the risk occurs.
- *Risk monitoring*: Setting up measurement and other monitoring to spot risks coming so you have time to respond proactively. Note that setting up process measures through risk management is a very good way of ensuring that the things you are measuring are the right things and will lead to actions.

The opposite of risks are opportunities, and many risk management techniques can also be used for opportunity management.

Risk Management is increasingly recognised as being concerned with both positive and negative aspects of risk. It should address methodically all the risks surrounding the organisation's activities past, present and in particular, future.

1.1.7 Create a risk management plan

Follow all of the planned methods for mitigating the effect of the risks. Purchase insurance policies for the risks that have been decided to be transferred to an insurer, avoid all risks that can be avoided without sacrificing the entity's goals, reduce others, and retain the rest.

Risk Quantification imparts a sound understanding of the tools available for assessing exposure to risk: quantifying both the probability of the event, frequency of the event or the likeliness of it occurring.

1.1.8 The Role of the Insurance Broker

The broker has a broad advisory role in helping the organization to determine its insurance requirements as well as placing the insurance on their behalf.

This evolution has been evidenced even more so in many regions of the world, most notably continental Europe, where risk managers have little or no reliance on their brokers, preferring to place their coverage directly with insurers.

- **Advisory**

The insurance broker can provide the internal risk manager with information that assists the risk manager in determining the risk transfer strategy for their organization. This information can include exposure and claims analysis, best practices within its own industry and business in general and information on insurance markets.

- **Transactional**

In order to efficiently access the worldwide insurance markets, many commercial insurance buyers utilize the services of insurance brokers. The extent and modalities of such use is extremely variable by country, industry, individual organization, and even by line of coverage. In many jurisdictions, such as North America the use of intermediaries is still prevalent; however in other countries, such as continental Europe, the traditional brokerage intermediation is less and less common.

Insurance brokers also might be asked to provide expertise in the "marketing" of the account. This should include the development of comprehensive, effective underwriting submissions, identifying potential insurance partners and designing and organizing presentations by clients.

- **Servicing and Administration:**

Once the insurance policy is placed, regardless of the extent of involvement of the broker in such placement, a significant amount of servicing and administration work remains to be done, and continues from the inception of the policy throughout its expiration. This can include checking of policy wordings, premium payments administration, issuing of certificates, routine claims administration, among other activities. Through economies of scale achieved in supplying similar services to numerous clients, the broker can often provide such services more efficiently than the internal risk management department. These services should be clearly listed in a comprehensive servicing agreement.

Many insurance brokers describe their role as purchasing the most coverage possible at the lowest price. This is not necessarily true. The role of the broker is to execute the insurance management strategy that is determined by its client, to the extent indicated by its client. For most organizations, that strategy will include the development of strong, long-term relationships with its insurance transfer partners. It is important that the risk manager build personal and corporate relationships with the underwriters on his or her account. While the broker might provide additional specific services, no individual can present the risk of an organization better than an internal professional. It is up to the risk manager to determine the risk financing strategy and then to direct the efforts relating to the presentation of the risk and the negotiation of the terms of the insurance policies.

While the influence of large insurance brokers with insurance companies is an important asset, it should in no way change the nature of this relationship. As the insured's representative, the broker must provide professional services to its clients with transparency and integrity.

1.1.9 Risk Perception Factors

- **Dread**

What’s worse, being eaten by a shark or dying of a heart disease? Both kill you, and heart problems are far more likely to do you in. But the dreadful death often evokes more concern. Despite the fact that heart disease kills roughly 25 percent more Americans each year, cancer evokes more fear in most people because cancer is perceived as a dreadful way to die. This helps explain why hazards that might cause cancer, such as radiation and industrial chemicals, evoke strong fears. Dread is a clear example of the more general way we think about risk in terms of our intuitive feelings, a process that has been labelled The Affect Heuristic.

- **Control**

Do you feel pretty safe when you drive? Most people do. Having the wheel in your hand gives you the feeling that you can control what happens. But switch to the passenger seat and you're a little more nervous because you are no longer in control. This also applies to process. If you feel as though you have some control of the process of determining a risk you will face, the risk probably won't seem as big as if it was decided by a process over which you felt you had no control.

- **Is the risk natural or is it human-made?**

Anthropogenic sources of radiation like nuclear power, mobile phones, or electrical and magnetic fields frequently evoke greater concern than radiation from the sun, which is a vastly greater risk (1.3 million skin cancer cases, 7,800 melanoma deaths per year in the U.S.) but less worrisome to many because it is natural. This factor helps explain widespread concern about many technologies and products, and offers important insights into one key factor in the debate over the Precautionary Principle.

- **Choice**

A risk we choose seems less risky than if that risk is imposed on us. If you use a mobile phone while driving, you may have on occasion noticed a driver next to you, using his or her mobile, and felt upset about the risk that the other driver was imposing on you, even while you voluntarily took the same risk, albeit with less concern. (Of workshop, you have control over your car, so that factor of control also contributes in this example.)

- **Children**

In addition to the genetic imperative to survive (which is, after all, the underlying impetus of our risk perceptions and responses) humans are genetically driven to reproduce. Survival of the species depends on survival of our progeny. So it is not surprising that research has found that a risk to children, like asbestos in a school or the abduction of a youngster, seems worse than the same risk to adults, such as asbestos in a workplace or the abduction of an adult. During last year's sniper attacks in Washington D.C., after five adults had been murdered, the sniper wounded a 13 year-old boy. The local police chief, tears in his eyes, declared of the sniper "He's really getting personal now!"

Is the risk new?

At the time bovine spongiform encephalopathy first showed up in Germany, an opinion survey found that about 85% of the public thought mad cow disease was a serious threat to public health. But the same poll done at the same time in the U.K., where it had been around for years and killed many for animals and more than 100 humans, found that only around 40% of the public thought mad cow disease was a serious threat. New risks, including everything from SARS and West Nile virus to new technologies or products tend to be more frightening that the same risk after we've lived with it for a while and our experience has helped us to put the risk in perspective.

- **Awareness**

The more aware of a risk we are, the more available it is to our consciousness, and the more concerned about it we are likely to be. SARS is currently evoking far more new coverage, attention and concern than influenza, which kills an estimated 36,000 people a year. In the Washington D.C. area last fall, fear of being shot by a sniper was much higher than the greater risks of heart disease cancer or stroke. The other risks weren't gone, but conscious concern about them was lower, because awareness of them had been reduced.

- **Can it happen to me?**

Any risk seems larger if you think you or someone you care about could be a victim. Consider terrorism in the United States. Prior to September 11, 2001, the American's were the victims of terrorism were "someone else". Yes, they were American's. But they were in foreign embassies, or on foreign military assignment. After 9/11/01, however, Americans at home felt they too were possible targets, and fear of terrorism grew.

This helps explain why statistically probability is often irrelevant to people and ineffective form of risk communication. Imagine what someone hands out 1 million bottles of water, one of which contains a poison. You get one of those bottles. Now imagine taking a drink from that bottle. Your risk of dying is only one in a million, but it still feels risky to drink it, because you could be that one. This helps explain why the acceptable level of risk to many people is zero.

1.1.10 The Risk-Benefit trade-off

Some risk perception researchers and many risk analysts believe that the risk-benefit trade-offs the major factor that makes us more or less afraid of a given threat. If we perceive a benefit from a behaviour or choice, the risk associated with it seems smaller. If there is no perceived benefit, the risk seems larger. When measles and polio were prevalent, the benefits of vaccination were perceived to outweigh the risk of the side effects. But no, with these disease rare, the perception of some parents is that the risks of those side effects, as low as they are, outweigh the benefits of vaccines. Many American health care workers, "first providers", are refusing a smallpox vaccination because of the risk of the treatment, low though it may be, seems larger than the benefit, which is protection from a disease they aren't convinced is a threat at all.

1.1.11 The Implications

But what of all this? What is the utility of understanding the underpinnings of our fears? We suggest that by realizing and respecting the realities of affect and other heuristic processes, and but accepting that they are apparently deeply rooted and reflect intrinsic human techniques for survival, policy makers can incorporate these values, as well as fact-based analysis, into their risk management decision making. Further, by understanding the reasons people perceive risk as they do, policy makers can communicate with various audiences about these issues in terms of language relevant to people's concerns.

Risk communication which acknowledges and respects the affective motivators which underlie people's concerns, rather than dismissing such perceptions as 'irrational' because they are not solely fact-based, is likely to be more successful in helping people make more informed choices about the risks they face.

This is directly a matter of public health. People, who are either too afraid of relatively low risks, or not afraid enough of relatively big ones, make dangerous choices. People afraid of flying choose instead to drive, a much riskier behaviour. People afraid of terrorism or other crimes take the risk of acquiring firearms. In 2001 people afraid of anthrax took antibiotics prophylactically increasing the proliferation of drug-resistant bacteria.

Further, chronic stress, by altering blood levels of adrenaline and cortisol, impairs the immune system. Worrying too much about getting sick may actually increase the likelihood that you will get sick, or sicker, or stay sick longer, or die, from any infectious disease. Chronic stress is also associated with the likelihood of type-II diabetes, accelerated osteoporosis, and cause decrements in learning and long term memory. Fear is, in itself, a risk.

Not enough fear can also be dangerous. People unafraid of natural risks like solar radiation, or risks that they think they can control like driving, or risks that are associated with benefits, such as smoking or alcohol consumption or fat and calorie-rich diets, fail to take adequate precautions, and they too face a greater likelihood of premature death. Lack of appropriate caution can be dangerous too.

As a societal level, elevated concern about relatively low risks, and too little concern about relatively big ones, is also potentially harmful. People afraid of a risk that triggers their intuitive fears demand government protection from that risk, though it may not actually be as much of a threat as they feel. Conversely, if a threat is indeed high but does not trigger affective alarm, demand for protection will be low. This drives allocation of resources that is suboptimal form public health. Time and money spent protecting people from greater risks. As a result, some of the people left unprotected from those higher risks will suffer. Some will surely die.

1.1.12 Possible Solutions

One solution to the dangers that arise when the analytic and affective sides of our risk perception don’t agree is effective risk communication, informed and empowered by an understanding of risk perception. This must become a priority at the highest levels of policy making in government, in business, and in international affairs. More must be done to help people keep their sense of risk in perspective. Decision-makers must realize, and accept, that the dangers of misperception of risk are reasonable, and pose both a threat to public health and an impediment to policy making that will provide the greater benefit to public health.

Effective risk communication requires recognition by policy makers that there are risk perception implications in what they do, that communication is not just what they say and how they say it. Setting a threshold for acceptable exposure to a pollutant, allowing or disallowing a product or process, requiring or not requiring labelling – indeed all risk management decisions – have risk communication mean and impact. At the most senior level, government agencies must consider the risk perception and communication implications of their actions as policy choices are being made. Risk communication must be thought of as more than just press releases, news conferences, and public service campaigns. It is substance, not just spin.

Some call this pandering to irrationality and emotion, and suggest instead that a benevolent technocracy should be empowered to manage the societal risk in order to ensure intelligent, rational and effective policies. But this fails to recognize the sensitive and pivotal issues of trust and control. Even the most benevolent process, if removed from the input of citizen values, will feel like one overt which the public has too little control and will not likely be trusted. The policies of such a process are more likely to provoke resistance than support. Further, the very idea of such a rationality-based technocracy fails to accept that risk perception is at least as much an effective and intuitive process as it is analytical, and that fear itself, either too much or not enough, is a significant risk that also must be factored into decisions about the public and environmental protection.

Risk communication, informed by the insights of risk perceptions, is a powerful yet neglected tool in helping people make more informed and ultimately healthier choices for themselves. More informed individual decision making will in turn free the leaders of social institutions to make reasoned risk management choices that will maximize the public and environmental health with the most efficient use of limited resources.

Having identified the risks you need to identify ways of controlling them or plan how to handle the financial impacts of the risk. For example: You identify that hijacking is a risk that most South Africans face daily.

In the table below you will observe examples of controlling the risk through the different risk strategies.

Some of the risks involved in hijacking are:

- Loss of life – self or passengers
- Loss of vehicle and goods
- Injury to self or passengers
- Disability resulting from injuries sustained
- Liability for injury to others (if in self-defence you hurt your attackers)

1.2 The basic elements of a contract with reference to three different personal contracts and an indication is given of the consequences of not honouring each contract

Often people enter into verbal or written contracts in order to effect an agreement between two or more parties.

1.2.1. Some definitions of Contracts

A contract is defined as an agreement between two or more parties that creates in each party a duty to do or not do something and the right to performance of the others duty or a remedy for the breach of the others duty also a document embodying such an agreement.

Another definition is that a contract is the legal term for a bargain or agreement; some writers, confine the term to agreements enforceable by law.

The term contract includes every description of agreement, or obligation, whereby one party becomes bound to another to pay a sum of money, or to do or omit to do a certain act; or, a contract is an act which contains a perfect obligation. In its more confined sense, it is an agreement between two or more persons, concerning something to be, done, whereby both parties are bound to each other or one is bound to the other. A contract may also be defined as an agreement, upon a sufficient consideration, to do or not to do a particular thing. It has also been defined as a compact between two or more persons.

1.2.2 Elements of a contract

- The contract must be <u>lawful</u>, e.g. If John contracts with Paul to murder his wife for R100 000 and Paul defaults on the contract, John cannot sue Paul as the action of the contract was unlawful.
- <u>Performance under the contract must be possible</u> at all times of it conclusion. E.g. If John contracts to buy a car from Paul, but prior to delivery the car is written off; John is no longer liable under the contract.
- The prescribed formalities must be <u>complied</u> with.
- It must <u>free of duress</u> or coercion – all parties are willing
- There must be <u>more than one party</u> to a contract – a person cannot enter into contract with themselves. E.g. Jenny's contract to herself to lose 1kg a week is not considered a lawful contract.
- The parties must reach <u>consensus</u> (i.e. they must agree on all aspects of the contract)
- The parties must have the <u>legal capacity</u> to enter into the contract. The following people have no or little contractual capacity:

Minors:

Minors are generally considered to be under the age of 18 or under guardianship as they are not mentally sound.

Insolvents:

Persons sequestrated by order of the court

Persons under curatorship

People for whom the court has appointed a curator as they are incapable of handling their own financial affairs

1.2.3 Examples of contracts:

<u>CONTRACT ONE: LEASE</u>

1. PARTIES: The parties to this lease are: (Insert full names and address of the Lessor) (Insert full names and address of the Lessee) 2. DWELLING:

The Lessor lets to the Lessee
(insert erf/unit no., property description, physical address)

(“dwelling”)

3. PERIOD

The lease will commence on________________and remain in force for a period of_______________until__________________

4.RENT

4.1 The rent will be an amount of ________________per month and shall be subject to an annual escalation of ___________________%per annum.

4.2 The Lessee shall pay the rent:

4.2.1 in cash, without deduction or set-off;

4.2.2. in advance on the______________day of each month commencing on_______________

4.2.3. to the Lessor are ____________________ or such other place as the Lessor may nominate in writing from time to time.

5. USE OF DWELLING

5.1 The Lessee is entitled to use the dwelling for residential purposes only. The Lessee shall not, except with the prior written permission of the Lessor, use the dwelling for any other purpose.

5.2. While the lease is in force, the Lessee shall:

5.2.1 comply with all laws affecting the occupation of the dwelling;

5.2.2 not contravene or permit the contravention of, any condition of title under which the Lessor owns the dwelling;

5.2.3. not create any nuisance from the dwelling

5.2.4 not do or keep on the premises anything which may not be done or kept in terms of any policy of insurance in respect of the dwelling.

6. MAINTAINANCE:

6.1 Throughout the period of this lease the Lessee shall maintain the whole of the dwelling in good order and keep the property clean, habitable and tidy and care for and maintain the garden and swimming pool, be responsible for the maintenance, repair, upkeep and/or decoration, as the case may be, of the interior of the property including all ceilings, all walls and floor coverings, all doors and windows, all cooking, heating, cooling, lighting, plumbing and air-conditioning installations (and any part of any such doors, windows and installations) all other fixtures, fittings, furnishings and any machinery and equipment in or on the property.

6.2 The lessor or its agent will be entitled, at all reasonable times and upon reasonable notice, to enter and inspect the premises.

7. IMPROVEMENTS:

7.1 The Lessee shall not make any structural alterations or additions to the dwelling without the Lessor's prior written consent, which shall not be unreasonably withheld.

7.2 Any alterations or additions made with the Lessor's consent must be carried out by the Lessee at his/her own cost.

7.3. The Lessee will not be entitled to remove any alteration or additions that he/she has made. On termination of the lease they will remain the property of the lessor, either with or without compensation, as agreed upon in advance between parties.

8. RATES AND OTHER CHARGES:

8.1 The Lessor shall pay any rates levied by the local authority on the dwelling.

8.2 The Lessee will be liable for all other charges in respect of the dwelling, including charges of electricity, refuse removal, sanitation, sewerage and water.

8.3 The Lessee shall not sub-let the whole or any part of the property without written consent of the Lessor, which consent shall not be unreasonably withheld.

8.4 The Lessee shall not cede or assign this lease.

8.5 In the event of the total or partial destruction of the property, or any portion by any cause, the Lessor shall be entitled to terminate the lease but the Lessee shall, during the period which the property or part thereof is unfit for occupation, be entitled to a proportionate abatement of rent. The Lessee shall have no claim for compensation against the Lessor, but should the destruction be due to default or negligence of the Lessee, his family, servants or persons occupying the property under him, the Lessor shall under these circumstances be entitled to claim payment of such damages as the Lessor may have suffered.

9. DUTIES OF LESSEE AND DUTIES OF LESSOR:

9.1. The Lessor must furnish the Lessee with a written receipt of all payments received by the Lessor from the Lessee;

9.2. Such receipt must be dated and clearly indicate the address including the street number and further description, if necessary, of the dwelling in respect of which payment is made and whether payment has been made for rental, arrears, deposit or otherwise and to specify the period for which payment is made;

9.3. The deposit paid by the Lessee must be invested by the Lessor in an interest bearing account with a financial institution and the Lessor must pay the Lessee the interest at the rate applicable to such account which may not be less than the rate applicable to a savings account with a financial institution and the Lessee may, during the period of the lease, request the Lessor to provide him/her with written proof in respect of interest accrued on such deposit and the Lessor must provide such proof on request/s;

9.4. The Lessee and the Lessor must jointly, before the Lessee moves into the dwelling, inspect the dwelling to ascertain the existence or not of any defects or damage therein with a view to determining the lessor's responsibility for rectifying any defects or damage. A copy of the list of defects must be attached to this lease;

9.5. At the expiration of the lease the Lessor and the Lessee must arrange a joint inspection of the dwelling, at a mutually convenient time to take place within a period of three days prior to such expiration, with a view to ascertain if there was any damage caused to the dwelling during the Lessee's occupation thereof;

9.6. On the expiration of the lease, the Lessor may apply the deposit and interest towards the payment of all amounts for which the Lessee is liable under the said lease, including the reasonable cost of repairing damage to the dwelling during the lease period and the cost of replacing lost keys and the balance of the deposit and interest, if any, must then be refunded to the Lessee, by the Lessor, not later than 14 days of restoration of the dwelling to the Lessor;

9.7. The relevant receipts which indicate the costs which the Lessor incurred, must be available to the Lessee for inspection as proof of such incurred by the Lessor;

9.8. Should no amounts be due to the Lessor in terms of the lease, the deposit together with the accrued interest in respect thereof must be refunded by the Lessor to the Lessee, without any deduction or set-off;

9.9. Failure by the Lessor to inspect the dwelling in the presence of the Lessee is deemed to be an acknowledgement by the Lessor that the dwelling is in good and proper state of repair and the Lessor will have no further claim against the Lessee, whom must then be refunded, in terms of this subsection, the full deposit plus interest by the Lessor;

9.10. Should the Lessee fail to respond to the Lessor's request for an inspection, the Lessor must, on expiration of the lease, inspect the dwelling within seven days from such expiration in order to assess any damages or loss which occurred during the tenancy;

9.11. The Lessor may in the circumstances indicated above, without detracting from any other right or remedy of the Lessor, deduct from the Lessee's deposit and interest the reasonable cost of repairing damage to the dwelling and the cost of replacing lost keys;

9.12. The balance of the deposit and interest, if any, after deduction of the amounts contemplated, must be refunded to the Lessee by the Lessor;

9.13. The relevant receipt which indicates the cost which the Lessor incurred, as contemplated above, must be available to the Lessee for inspection as proof of such cost incurred by the Lessor;

9.14. Should the Lessee vacate the dwelling before expiration of the lease, without notice to the Lessor, the lease is deemed to have expired on the date that the Lessor established that the Lessee had vacated the dwelling, but in such event the Lessor retains all his/her rights arising from the Lessee's breach of the lease;

9.15. If on the expiration of the lease, the Lessee remains in the dwelling with the express or tacit consent of the Lessor, the parties are deemed, in the absence of a further written lease, to have entered into a periodic lease on the same terms and conditions as the expired lease, except that at least one month's written notice must be given on the intention, by either party, to terminate the lease;

9.16. A copy of any House Rules, applicable to the dwelling, must be attached as an annexure to this lease.

10. RETURN OF THE PREMISES:

On termination of this lease, for whatever cause, the Lessee shall immediately return the dwelling to the Lessor in the same good order and condition as they were at the commencement date, fair wear and tear excepted.

11. LESSOR'S REMEDIES FOR BREACH:

The Lessor will be entitled to cancel this lease by written notice to the Lessee of the latter:

11.1. fails to make payment in terms of this lease on due date and remain in default for 7 (seven) days after receiving written notices from the Lessor to make payment;

11.2. commits any other breach of this lease and fails to remedy the breach within 14 (fourteen) days after receiving written notice from the Lessor to do so;

11.3. Should the Lessee fail to make payment to the third person as required by the lease or fail to perform any other obligation due in terms of this lease and remain in default for 7 (seven) days after receiving written notice from the Lessor to remedy the default, the Lessor may without prejudice to its rights, make the payment or carry out the obligation and recover the amount paid or the cost of carrying out the obligation (as the case may be) from the Lessee on demand;

11.4. The Lessor's remedies under 10.1 and 10.2 are additional to any other remedies it may have;

11.5. Should the Lessor cancel this lease and the Lessee disputes the Lessor's right to do so, remain in occupation of the dwelling then, pending the determination of the dispute:– the Lessee shall continue to make all payments in terms of this lease on their date, 11.6. the Lessor's acceptance of those payments will not in any manner affect its right to cancel this lease or any other remedy it may have;

11.7. Should the dispute between the Lessor and the Lessee be determined in favour of the Lessor, the payments made in terms of

11.8. will be regarded as amounts paid by the Lessee on account of the loss sustained by the Lessor as a result of the holding over of the dwelling, by the Lessee.

11.9. The Lessor will be entitled to cancel this lease by written notice to the Lessee if the Lessee commits any breach of this lease and fails to remedy same within 14 (fourteen) days after receiving written notice from the Lessee to do so.

Signed at __________________ on this ______ day of ____________20 ___ in the presence of the undersigned witnesses.

WITNESSES:

1. ____________________________ ____________________________

LESSOR

2. ____________________________ ____________________________

LESSEE

3. ____________________________ ____________________________

CONTRACT TWO: DOMESTIC EMPLOYMENT CONTRACT

Between:
____ ("The Employer")
of ____
____ ("address")
and
____ ("The Employee")

1. The Employee is employed as a domestic worker as from: ____________ 200 __.

2. The Employee's duties include:

______________________________ ____________________________
______________________________ ____________________________
______________________________ ____________________________
______________________________ ____________________________

3. The Employee's normal working hours will be _________ hours per week made up as follows:

a) *Monday to Friday (inclusive)* __________ am to __________ pm
Meal intervals will be from _____________ to ______________
Other breaks: from __________________ to ______________
b) *Saturdays*: _______________________ am to __________ pm
Meal intervals will be from _____________ to ______________
Other breaks: from __________________ to ______________
c) *Sundays*: _______________________ am to __________ pm
Meal intervals will be from _____________ to ______________
Other breaks: from __________________ to ______________

4.1 Overtime will only be worked as agreed from time to time and will be paid at the rate of one and a half times the hourly wage.
4.2. The employee will be required to be on standby from time to time, for which R20 per standby shift is payable.
4.3. The employee's total remuneration (hour/day/week) (circle applicable) is made up as follows:

Cash	R
4.3.1. Accommodation	R
4.3.2. Food	R
4.3.3. Transport allowances	R
4.3.4. Other	R

Deductions
TOTAL REMUNERATION
R…………

____
R…………
4.5 The cash portion of your remuneration will be paid by ___________ (cash / cheque / transfer to bank or building society account) on a

_________________ (daily / weekly / fortnightly / monthly) basis.

4.6 Your remuneration will be reviewed on or before *1 November* of every year.

5. The employee is entitled to three weeks paid annual leave. The three weeks are accumulated after every 12 months of continuous service. Leave is to be taken at times agreed with the employer.

6. During every sick leave cycle of 36 months, the employee will be entitled to an amount of paid sick leave equal to the number of days s/he would normally work during a period of six weeks.

6.1 The employee is entitled to one day's paid sick leave for every 26 days worked during the first six months of employment.

6.2 The employee must notify the employer, as soon as possible, if absent from work through illness.

6.3 The employee may be required to submit a medical certificate if absent for more than 2 consecutive days or has been absent on more than two occasions during an eight week period.

7. The employee is entitled to 4 consecutive months of unpaid maternity leave.

8. The employee is entitled to 5 days paid family responsibility leave per year.

9. Either party can terminate this agreement by giving one week's notice during the first six months of employment and with 6 weeks' notice thereafter. Notice must be given in writing except when it is given by an illiterate employee. In the case of an illiterate employee, notice must be explained orally by or on behalf of the employer.

10. The employee will be provided with accommodation during her/his employment. Furthermore, the employee should be the only one staying in the accommodation unless prior arrangements have been made with the employer. Permission will have to be obtained for visitors wishing to stay the night but such permission will not be necessary if the employee's direct family are visiting.

11. The employee will be provided with sets of uniform free of charge and such uniform will remain the property of the employer.

Signed at ___________________ on this _______ day of ___________, 2003.

______________________________	_________________________
Employer	Witness
______________________________	_________________________
Employee	Witness

1.2.4 Risks of not adhering to a contract

- **Breach**

A violation in the performance of or a failure to perform an obligation created by a promise, duty, or law without excuse or justification.

- **Partial Breach**

A breach of contract in which the breaching party's non-performance is minor and gives rise to the right to sue for damages but not to suspend performance or cancel the contract.

E.g. Under a contract to sell property, the contract stipulates that the guarantees must be received within 21 da.7ys. However, the guarantees is only received within 30 days. The consequence is to pay occupational interest.

- **Total Breach**

A breach of contract under the Contract that is so substantial that it gives rise to the right to cancel the contract and sue for damages a violation or disturbance of something (as a law or condition).

E.g. Under a contract to sell property, the contract stipulates that the guarantees must be received within 21 days. No guarantees are received. Therefore the contract can be cancelled or a new lower purchase price can be negotiated on the property due to negligence.

There are many ways to terminate the obligations of a contract. Most often, parties conclude their contract obligations by performing them. However, sometimes problems arise and parties cannot or will not complete their obligations under the contract. Therefore, contracts may be terminated by reasons of rescission (annul, cancel, withdraw), breach, or impossibility of performance.

Impossibility of Performance

Performance means that each party to the contract has performed its obligations; the exchange of promises has been completed and each side has received what it has bargained for. Once the contract has been completed, neither party owes the other party any further obligation. For example, if you make a contract to perform at a concert, and you appear, perform, and get paid, ordinarily the obligations of the parties to the contract are over.

Impossibility of performance can terminate a contract if an unforeseen contingency prevents the performance of the contract. For example, you contract with a famous painter to do your portrait and the famous painter dies. The obligation to paint your portrait cannot be completed. The contract to paint your portrait is terminated by impossibility of performance.

- **Rescission**

Rescission may terminate the obligations of a contract in a variety of circumstances. One party may have the legal right to rescind the contract, or the parties together agree to terminate the contract. For example, a minor has the right to rescind contracts because a minor lacks competence to make them.

- **Breach of Contract**

Breach of a contract may terminate the obligations of the contract. Either one party or both parties have failed to perform an obligation as expected under the contract. A breach may occur when a party:

- Refuses to perform the contract
- Does something that the contract prohibits, or
- Prevents the other party from performing its obligations

Not all breaches of contract end up in court. The law distinguishes between material and immaterial breaches of contract.

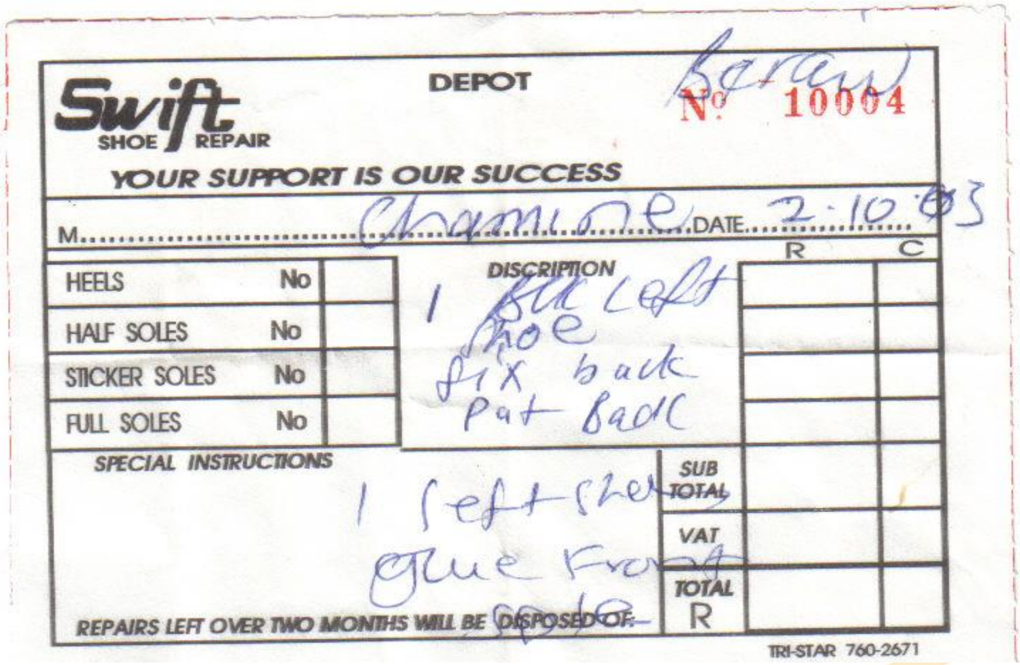
- A material breach of contract gives rise to a cause of action in court. A material breach is a serious one; it is a breach that goes to the heart of the contract. The injured party can seek damages; that is, a money payment adequate to cover economic losses resulting from the breach of contract. For example, a violinist who shows up at a concert but doesn't bring his violin has materially breached the contract to perform if he cannot play.
- An immaterial breach of contract is a trivial breach of contract and does not kill the contract. For example, assume a service contract for a heating system under which the service person agrees to inspect the system each month on Thursday. Contrary to the contract, the service person makes inspections on Mondays. This act is a technical breach of the contract but it is immaterial, unless for some reason the inspections needed to be done on Thursday as opposed to any other day.

- **Notice of Termination**

Notice of the termination of a contract may be given according to the terms of the contract. For example, the parties may agree in a contract that it can be terminated in a particular way, such as one party giving the other party written notice that the contract is terminated. Following the provision contained in a contract as to how it can be terminated will ordinarily terminate the contract.

1.3 The small print clauses in three personal contracts analysed and an indication of the implications of the clauses for the individual and any associated financial risk

When we enter into verbal or written agreements with any other party, there can be what is commonly known as "small print" clauses to the agreement. These are special conditions that apply to the specific terms of the agreement. Consider the following receipt from a shoe repair company. Can you identify the small print clause that an individual agreed to by leaving their shoes and accepting the ticket from Swift?



Swift SHOE REPAIR

DEPOT

Nº 10004

YOUR SUPPORT IS OUR SUCCESS

M. Charmine DATE 2.10.03

			DISCRIPTION	R	C
HEELS	No		1 ... left shoe fix back Pat back		
HALF SOLES	No				
STICKER SOLES	No				
FULL SOLES	No				

SPECIAL INSTRUCTIONS

1 left shoe glue front sole

SUB TOTAL

VAT

TOTAL R

REPAIRS LEFT OVER TWO MONTHS WILL BE DISPOSED OF

TRI-STAR 760-2671

Did you identify that if you do not collect your shoes within two months of the date of receipt, the company is entitled to "dispose" of your shoes?

Other small print examples include:

- Many gym membership contracts include a three-month written notice period to cancel membership. Gyms have included this clause to safeguard their risk in response to legislation that prohibits memberships exceeding one year. This legislation was introduced as a result of the losses incurred by gym members having life time memberships at the time of the collapse of the Health and Racquet Clubs.
- A further example would be the print on the back of a parking ticket or a visible signboard, which absolves a company of any responsibility for loss of or damage to a car whilst parking in a parking lot.

You do not necessarily have to sign a contract for there to be an agreement between two parties. By leaving your shoes at the shoe repair shop or your car at the car park you are agreeing to the terms laid down by the provider.
Even verbal agreements between parties are considered to be contracts and legally binding.
The only time a written contract has to be in place, is when there is sale of land or property.

1.4 The concept of surety ship with reference to how this can impact on personal liability and therefore on financial risk

Sometimes people do not qualify for the credit that they apply for. There can be various reasons for this. This includes that they do not earn enough money, that they have judgments against them, or sometimes that they are just too young to have built up a credit record. The borrower may ask for a guarantee against the loan. One guarantee may be a surety:

- This surety ship is an agreement on who will be answerable for the debt in the case of default payment.
- One party or person takes primary responsibility for the debt, should the debtor default on payment. (i.e. not meet the loan repayments)
- If the debtor defaults on payment, the creditor will take action against the guarantor, without first taking action against the debtor.
- If the guarantor pays the debt, he may then himself attempt to recover from the debtor.
- The liability of the guarantor may disappear if the contract between the debtor and the creditor is altered without his notice.

Control the risk	Methods of controlling the risk and handling the financial impact.
• Bear the risk: • This is also referred to as retaining or assuming the risk. You make a decision to bear any financial risk.	• You drop your short term insurance on your ten year old car and continue to drive it. • You do not have medical insurance or health cover. • You do not have life or disability cover. • You do not have vehicle tracking
• Transfer the risk: • This is where you arrange for someone else to bear the financial responsibility for the event in return for payment.	• You have vehicle insurance, medical aid cover, life and disability cover, legal aid, and/or personal liability cover.
• Reduce or control the risk: • You reduce the likelihood of an event and or you take actions that would reduce the financial loss if the event occurred	• You don't drive in "hijack hotspot" areas • You do not drive alone late at night • You go on an anti-hijacking workshop • You vary your routes • You activate vehicle tracking cover
• Remove the risk: • You go beyond reducing or controlling	• You sell the car and use public transport.

Control the risk	Methods of controlling the risk and handling the financial impact.
the risk and avoid it entirely.	

1.5 The concepts of absolute and collateral cession with reference to how the two types impact on financial risk

For various reasons, people sometimes sign over their rights and obligations to another person or party. E.g. a person (the cedent) may sign over their rights to the benefits of a life contract to another person (the cessionary).

There are two types of cessions:

1.5.1 Absolute cession

The cedent signs all rights to the cessionary who becomes the owner. In this instance cessionaries can nominate their own beneficiary or his estate. The cessionary also becomes liable for the payment of premiums.

E.g. Linelle divorces Mark. As part of the divorce settlement he signs over his life policy which has a surrender value R100 000. Mark loses all rights to the policy. Mark remains the life assured. Linelle can choose to surrender the policy, take a cash advance on it or keep it going till Mark passes away. She has full rights to it as ownership has passed to her.

1.5.2 Collateral (security) cession

This occurs when the cedent owes money to the cessionary and signs over the rights of his policy / property in order to provide security for the debt.

No transfer of ownership occurs, and the cedent is still responsible for the payment of premiums. If the cedent does not repay the debt, the cessionary takes cession as compensation of the money owed to him/her. If the cedent repays the debt, the cession is cancelled and the cessionaries right to the contract ceases.

E.g. Precious owes Bafana R20 000 and cedes her life policy of R50 000 to him in security for the debt. If Precious should pass away, the insurance company will pay Bafana R20 000 to settle Precious' debt. The remaining R30 000 will be paid to Precious' estate or beneficiary

Module 2

<u>The individual's liabilities and duties with regard to service contracts and the use of utilities</u>

This Module deals with:

- The concept of a utility with examples.
- The concept of contracting a service compared with purchasing a product
- The kind of service contracts that an individual may enter into are listed in a table and an indication of the cost of each service, when payment for the contract is due, and the implications if the individual does not honour the contract.
- The concepts of a deposit and a once off payment and an indication of the implications and risk associated with each.
- The financial implications of paying a lump sum in advance for a service or paying monthly and real savings or loss calculated for three examples.
- The liability associated with utilities are listed in a table and an indication of the how the cost of each utility is calculated, when payment is due, and the implications if the individual does not pay for the utility.
- Ways of reducing the cost of utilities for two different utilities and a decision is made on how to make the most cost effective use of the utility.
- The issue of moral obligation of the user of a service contract or utility from the point of view of the user, the service provider and other parties who may be directly or indirectly affected by the actions of the users.

2.1 The concept of a utility with examples.

A utility can be described or defined as a commodity or service, such as electricity, water, or public transportation that is provided by a public utility. A utility is also referred to as a basic service such as electricity, petrol, or water. Utilities are often regulated by the government.

2.2 The concept of contracting a service compared with purchasing a product

Contracting a service means that the work will be done by an external person / contractor other than oneself. An example is an electrician that is contracted to rewire the electricity of a house, or a plumber to fix the drain pipes. Contractors are often paid a higher hourly rate than what it would have amounted to if the specific product was purchased and the work done by the individual himself, as there is extra responsibilities that rest with the contractor.

2.3 The kind of service contracts that an individual may enter into are listed in a table and an indication of the cost of each service, when payment for the contract is due, and the implications if the individual does not honour the contract.

The table below gives a breakdown of some utility services, the costing and implications of non-payment of the particular service:

Utility	Provider	Payment due dates	Implications of non-payment	Ways of reducing costs
Water	Municipalities	As per the Municipality account due date (usually between the 7th and the 15th of a month)	The water and sanitation usually forms part of the electricity/ municipal account. In case of non-payment, the supply to the particular property may be suspended until the arrears and penalty fee have been paid in full. Liable for credit control action. Legal action will be instituted should these measures fail to recover the arrears. If the account is 30 days in arrears, an instruction will be given to disconnect water to the specific property. No sanitation services will be received.	Call your local municipality. Do not allow anyone to tamper or interfere with the meter or pipes/cables leading to the meter. Use water scarcely
Electricity	Eskom	As per the Municipality account due date (usually between the 7th and the 15th of a month)	Liable for credit control action. If a conventional electricity meter is used, the supply to the particular property may be suspended until the arrears and penalty fee have been paid in full.	Management of electricity consumption. A prepaid meter is a good idea Use electricity wisely Turn off geysers during working hours

Utility	Provider	Payment due dates	Implications of non-payment	Ways of reducing costs
			Legal action will be instituted should these measures fail to recover the arrears. If the account is 30 days in arrears, an instruction will be given to disconnect electricity to the specific property.	
Telephone	Telkom Neotel	As per the Telkom account due date (usually the 7th of a month) As per the Neotel account due date (usually the 7th of a month)	Suspension of service until payment has been received. Handing over of account to lawyers if no payment is made. Suspension of service until payment has been received. Handing over of account to lawyers if no payment is made.	Make calls in off-peak hours Make calls in off-peak hours (Fridays from 19:00 to Mondays 07:00) when all calls will be free
Refuse **Sewage** **(Sanitation)**	Municipalities	As per the Municipality account due date (usually between the 7th and the 15th of a month)	The water and sanitation usually forms part of the electricity/ municipal account. Liable for credit control action. In case of non-payment, the supply to the particular property may be suspended until the arrears and	N/A

Utility	Provider	Payment due dates	Implications of non-payment	Ways of reducing costs
			penalty fee have been paid in full. Legal action will be instituted should these measures fail to recover the arrears. If the account is 30 days in arrears, an instruction will be given to disconnect water to the specific property. No sanitation services will be received.	

In terms of the advantages and disadvantages of ownership versus renting of appliances, the following is applicable:

	Advantages	Disadvantages
Ownership	• Full ownership of the asset (have something to show for the cash outlay) • Increases a person's net worth • Two year guarantees	• Maintenance and repair costs • Asset depreciated and need to upgrade • Have to insure object • Guarantees expire and products become outdated
Renting	• Uninterrupted viewing – Equipment is fixed in your home or replaced immediately at cost to provider • Can get upgrades and latest models • Don't have to pay additional insurance (although option exists to include under your own household insurance) • Rent to own – eventually the appliance becomes your own	• Hidden costs are built into monthly hiring fee (are you paying risk premium for repairs you may not claim?) • Asset depreciates and need to buy new assets • Hidden costs built into the monthly hiring fee (Are you paying more insurance than you would have on your own household insurance?) • It may work out cheaper to purchase this on HP

2.4 The concepts of a deposit and a once off payment and an indication of the implications and risk associated with each.

For various services, product and utilities providers offer various payment options to guarantee their services and products. Sometimes, consumers have a certain amount of choice regarding these payment options and at other times, there is no choice on behalf of the consumer regarding the deposit if he wants the service offered by the provider.

- Paying a deposit on the item to secure it, and then paying for the item in full when it is received.

  Example:

  - Martha books a holiday at a holiday resort for a week at R250 a day in 6 months' time. The resort requires a deposit of 25% (R437.50) up-front to secure the week for Martha. On payment of the deposit the resort is assured that Martha is serious about the booking, and should he not arrive they can offset their losses by keeping the deposit.

- Paying for the item in full

- Sometimes discounts are offered for a full payment in cash up front.

  Example:

  - Some pharmacies offer a discount if you pay for your prescription medication up-front in cash and claim directly from your medical aid.

2.5 The financial implications of paying a lump sum in advance for a service or paying monthly and real savings or loss calculated for three examples.

In most municipalities rates and utility accounts are payable on a monthly basis.

You are billed directly with a monthly account by a Municipality for services supplied / rendered to the specific property that you own.

This means that levies or charges in respect of the following municipal services and taxes:

- Electricity and water consumption;
- Refuse removal;
- Sewerage services;
- Rates and taxes;
- Interest; or
- Miscellaneous and sundry charges

However, in the Cape it is common to have to pay rates yearly in advance.

In terms of paying a lump sum in advance for services versus paying monthly, there are no financial implications or savings in that regard.

2.6 The liability associated with utilities are listed in a table and an indication of the how the cost of each utility is calculated, when payment is due, and the implications if the individual does not pay for the utility.

This section was partly dealt with under heading 2.3

2.6.1 Definitions of urban service levels

Definition	Service Package
Basic	communal water, ventilated improved pit latrine (VIP) or equivalent, 5-8A electricity, graded roads gravelled only where necessary, open storm water channels lined only where necessary, communal refuse removal
Expected Urban Minimum	yard tap, VIP or equivalent, 20-30A electricity, graded roads gravelled only where necessary, open storm water channels lined only where necessary, kerbside refuse removal

Intermediate	yard tap, simple waterborne sanitation, 20-30A electricity, gravelled roads, open storm water channels fully lined, kerbside refuse removal
Full	in-house water, full waterborne sanitation, 60A electricity, paved roads with piped underground storm water systems, kerbside refuse removal

Alongside these service packages are the associated internal bulk and connector services.

2.7 Ways of reducing the cost of utilities for two different utilities and a decision is made on how to make the most cost effective use of the utility.

2.7.1 How to save electricity in your home

Saving electricity will not only save you money, but will also help with the rising power cuts, as the country needs to cut energy use by 10% for the current system to cope. Saving electricity will also give you a warm fuzzy feeling, as you will be doing your bit to conserve natural resources, i.e. coal, and reducing the impact energy consumption has on the environment, slowing down global warming.

The first step in saving electricity is to understand how electricity is used in your home. South African households, on average, use electricity in the following ways:

- Space heating and cooling: 18%
- Lighting: 17%
- Fridges and freezers: 8%
- Cooking: 11%
- Consumer electronics: 5%
- Consumer electronics on standby mode: 15%
- Geysers: 24%
- Miscellaneous: 2%

- **Standby for more Savings**

These days our homes are full of appliances that use electricity all the time, even when we aren’t there. We leave them on standby mode, waiting to be used again. You would think that an appliance on standby would only use a little electricity, but sadly we are mistaken.
In some households appliances of standby mode use the equivalent of leaving a 100W light bulb on all year
Some examples of appliances that use power, but can be switched off are; battery and phone charges, microwaves, computers, TVs, DVD players, decoders, Hi-Fis, game consoles, rechargeable toothbrushes, the list can go on and on. There are some appliances that do however, need to be powered all the time such as; home security systems, remote controlled gates and garage doors, to name but a few. Make sure you select low consumption models to reduce your electricity usage.

- **Check the Label**

Before you buy a new appliance, check the energy efficiency rating, which is rated on a scale from A (most efficient) to G (least efficient). A-rated appliances are better for the environment and cost much less to run.
For example, if you replace the fridge-freezer you bought in 1995 with an A-rated energy efficient one, you would save about R 680.00 a year on electricity. Some

brands are A+ or A++ rated - the pinnacle of appliance energy efficiency.

Here are some handy tips for reducing energy around the house
<u>In the Kitchen:</u>

- Use a kettle to boil water for cooking as it is quicker and uses less energy than a pot on the hob.
- Always match the size of the pan with the size of the stove plate.
- Use a microwave to cook as it is quicker and cheaper, 1 oven uses the same power as 18 microwaves.
- Only fill kettle with the amount of water that you need.
- Cut food into smaller sections before cooking to help it cook quicker.
- Make your toast in a toaster, not under the grill.
- Don’t keep opening the oven door while you are cooking.
- Always put a full load of washing in the washing machine and if the weather is good dry the clothes on the line outside.
- If you have a stove with heavy solid plates that retain heat, switch off the plate a few minutes before removing the pot.
- When you open your fridge door for more than a moment, it loses cold air. Cooling it down again will take a lot of electricity. So be quick and don’t let all that cold air out.
- Do not place hot food in the refrigerator or the deep freeze; rather allow it to cool outside first.
- Ensure that the door seals are in good condition and don’t put the refrigerator near the oven.
- Every time you switch on your dishwasher, it’s the same as switching on 120 CFL energy-saving light bulbs. Wait until the dishwasher is full before you switch it on. Use the economy programme wherever possible.
- Clothes should never be placed in the tumble dryer while they are still dripping with water, so be sure to remove excess water.

<u>Lights:</u>

- In most homes, lighting accounts for around 17% - 20% of the electricity bill. A considerable amount of electricity can be saved by replacing your conventional tungsten bulbs with compact-florescent lamps (CFLs). They are more expensive, but CFLs last 8 times longer.
- Turn off the lights that you don’t need on and use lighter lampshades as they will make the most of the energy.

- Fit lower wattage bulbs wherever possible and avoid leaving spot lights on for too long, as they use more electricity.

In the Lounge:

- Switch the TV off when not in use, leaving it on standby mode uses up to 50% of the power the TV would use if it was actually on, the same goes for the Hi-Fi's and computers.
- Rather use a gas heater or a temperature-controlled oil heater for space heating and switch of the heater if you leave the room.
- Curtains help to retain the heat, so draw them early in the evening.

In the Bathroom:

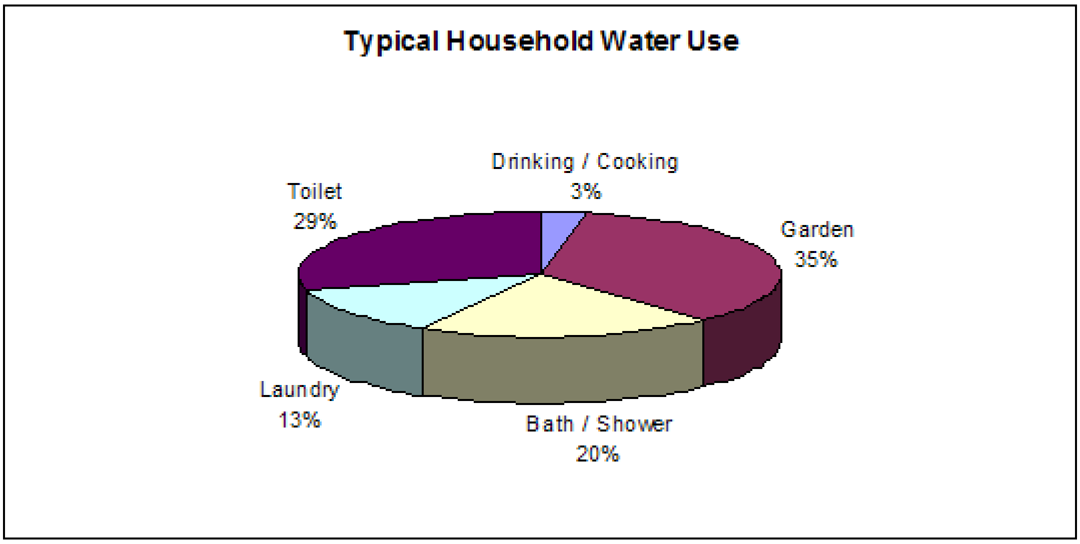
- Shower instead of running a bath, as a shower uses much less water and therefore, less hot water and less electricity.
- Fit low-flow shower heads, this will not only save water, but electricity too.
- A geyser blanket will insulate your geyser not allowing the heat to escape. To save even further, insulate the water pipes and turn the geyser's thermostat down to 60°C.

The Swimming Pool:

- The swimming pool filter pump is one of the largest consumers of electricity. So try to use the pump only when necessary. There are a number of timers available that can be fitted to the pump.
- During winter you can use the pool filter even less, as algae growth is limited, so the cleaning filter can be reduced to once every few days.
- Consider Solar Water Heating Panels and Heat pumps.

2.7.2 How to reduce water consumption in your home

The typical household in South African uses about 250 litres of water a day. That amounts to 7500 litres a month which is already more than the monthly free water allowance every household receives from the municipality.
The typical South African household consisting of 3 children and two parents would then use on average 37500 litres of water a month.



Here are a few easy suggestions how to save water in your home:

Around the home:

- Shower, don't bath – a bath uses an average of 160 litres, while a five-minute shower uses only 60 litres of water.
- Don't keep the tap running while you are brushing your teeth or shaving – this can save up to 20 litres of water a month.

- Cut down the amount of water flushed down the toilet pan. Toilets use about 30% of the total water used in a household. An old-style single flush toilet can use up to 13 litres of water in one flush. New, more water-efficient dual-flush toilets use only six litres for a full flush and four litres with a reduced flush. Alternatively, installing a cistern displacement device, such as a "Hippo" bag or using a full 2-litre plastic bottle of water in the cistern of your toilet could save you a whopping 7,300 litres of water each year.
- Make a point of checking to see if there are any leaks in the toilets or taps throughout your house. You can check if your toilet is leaking by adding a few drops of food dye to your cistern - if the colour seeps into the bowl, you have a leak. A toilet leak or a dripping tap can both waste up to 30 litres of water an hour and this ad up to 10,000 litres every year. Get them fixed – the cost you will save on water over a 12-month period will more often than not cover the plumber's bill.
- Don't turn your dishwasher or washing machine on unless they are fully loaded.
- Don't wash and rinse your dishes under running water – rather fill a sink with soapy water, wash them, and then rinse them in a sink of fresh water.
- Don't wash your car using a hosepipe – using two buckets of water can save up to 300 litres of water each time.

In your garden:

- To avoid wasting water via evaporation, be sure to only water your garden before 10:00 in the morning, or after 16:00 in the afternoon.
- Try to collect grey water from your bath or sinks, as well as

rainwater, and use these for watering your garden. You can invest in a professional grey water recycling system to do this, or you can invest in a rainwater collection system.

- Try and schedule your garden irrigation by watering less frequently, but for longer periods of time – this way, the water will sink deeper into the ground, encouraging a deeper root system and stronger plants.
- Plant indigenous and water-wise plants in your garden – try avoiding planting plants that require a lot of water. Lawns are especially bad culprits, requiring up to four times more water than other plants. As such, try and reduce the amount of lawn in your garden with paving and creating more flower beds.
- Make sure your irrigation system does not leak and that the sprays are directed to where the water is most needed and not spraying on the road or pathways in your garden.
- Don't backwash your pool too often – if you have a small pool, then you can backwash it once a month, and if you have a large pool, then you can backwash twice a month.

2.8 The issue of moral obligation of the user of a service contract or utility from the point of view of the user, the service provider and other parties who may be directly or indirectly affected by the actions of the users

The issue of moral obligation can be seen as a debate between different stakeholders that is part of the process. The following example will be used to illustrate this point:

A certain community is behind on their utility payments. The municipality is threatening to cut off their water supply until the arrears are caught up with. The community leaders have called for a meeting of all stakeholders. Each stakeholder has their own opinion about this matter:

- The community feel that they cannot pay outstanding fees for water provided to them by the municipality, as they feel that they have a right to have water.
- The municipality feels that it costs money to produce water for residents and that the community needs to recover their expenses.
- The ruling political party is defending by saying that that they do subsidise the costs of water as far as they can and have provided more access to water for the poor than ever before.

Module 3

Short term insurance as a means of reducing financial risk in own life

This Module deals with:

- The different classes of short term insurance and an indication of the cover in each case
- The risks in own life that could be reduced by short term insurance analysed and possible options for cover compared in terms of benefits and cost
- The need to update short term insurance policies regularly and an indication of the implications of under insurance
- Ways of reducing insurance premiums and the implications of a decision to spend less on insurance

3.1 The different classes of short term insurance and an indication of the cover in each case

Short term insurance describes a number of different categories of cover, such as commercial insurance (on commercial or industrial properties, for instance) personal insurance (on private property or assets, or corporate insurance (in respect of multinational assets or interests). For the purposes of this programme we will focus on personal insurance. Personal indemnity insurance or short term insurance as it is more commonly known is insurance which covers: the actual loss that the policy holder has suffered. It is insurance for uncertain events, the timing of which is uncertain

The nature of the subject matter of insurance is facts, which the insured knows. Insurers generally are not aware of facts unless the insured tells them. While the insured may examine a copy of the policy before accepting the insurer's terms, the insurer cannot examine all aspects of the insurance offer which may be material to his decision on terms and conditions. The questions set out in a proposal form do not only define the limits of what is material information. The duty of full disclosure of all relevant or material facts rests with both parties. Facts which are material, and must be disclosed, include:

- Those which would indicate that the risk is greater than would be expected from its class
- Those which may tend to make the amount of any loss greater than normal
- Previous loss and claims history
- Penalty terms or restricted cover applied by previous insurers
- The fact that the insured had absolved a third party form normal legal liabilities, which would affect subrogation rights
- Facts which are not material and do not need to be disclosed include:
- Facts which are known under any law
- Facts which reduce the risk or hazard
- Facts which are advised but which the insurer does not further investigate

- Facts which all insurers should know from his normal business operations
- Facts, which a survey would reveal.

Short term policies operate on the indemnity principle, meaning the insured is only paid for the actual losses suffered. Therefore you would want to be insured for as close to possible, the exact amount of the items being insured.

The insured can never be paid for a claim for more than the actual value of an item. Since you pay for the value and nature of risk of the insured event or item, and cannot claim for more than the actual losses you have incurred, there is no benefit to over insuring and events or items.

Similarly, there can be no benefit to the insured to insure for a value that is less than the actual value. If it is going to cost you R100 000 to replace the items in your home that are lost due to theft or acts of god (e.g. flooding), and you have only insured the contents for R80 000, you will experience a shortfall of R20 000 in replacing the goods if a claim arises. Furthermore, if an assessor finds that tat you have been paying a premium for insurance that is disproportionate to the risk, you can be penalised in your claim by the amount of the underinsurance. (E.g. you originally insured your household contents for R75 000.

Over the years you have acquired new assets and have not advised your insurance company that the value of your household contents have increased. You experience a theft, where you lose goods that would cost R30 000 to be replaced. An assessor is sent from the insurance company and finds that the value of your household contents is actually R90 000. You were under insured by R15 000. The insurance company can reduce / penalise your claim by the R15 00 and only pay out R15 000.

As has been established above, it is pointless to be over insured, because the insurer will only pay you for the actual losses incurred. Under insurance creates a deficit to the amount you need to replace the lost items and can result in penalties from your insurer when there is a claim. This means that you need to review and change your insurance cover periodically.

3.1.1 Homeowners Insurance

This insurance covers you for damage to the actual building and all the fixtures and fittings therein such as tiles, fitted carpets, fitted ovens, kitchen cupboards, and so forth. The insurance will cover you for damage caused by fire, lightning, explosions, storm, wind, water, hail, earthquakes and will even cover accidental damage to your glass and sanitary ware. Most policies will also cover you for loss of rent as a result of the property being so damaged that you cannot live in it.

There are many other extensions to the homeowners' policy which you should be sure to ask your broker about since you may have cover for specific losses but may not be aware of it. For example, you would be covered for accidental damage to water, sewage, gas or electricity connections if those lines lie within your property. The insurance covers liability where any third party is injured inside your property.

The policy will not cover you for subsidence and landslip or riot and strike cover unless it is specifically included. There are other exclusions in your policy and it is important that every person reads their policy to understand what the obligations are in terms of the policy and where they might not have cover.

Most Homeowners Insurance is offered by the Bank through which you obtain your bond. The bank is permitted to compel you to buy Homeowners Insurance to protect the asset. If your homeowners Insurance is not purchased through the Bank then most Insurance Companies in South Africa offer Home- owners Insurance and the rates are generally quiet competitive.

3.1.2 Household Contents Insurance

This insurance covers the contents of your home for damage caused by fire, storm, flood, theft, water leakage, accidental damage and so forth. Once again the policyholder should carefully read the policy to find out what exclusions there are on the policy. For example some insurance companies will not cover you if your house is unoccupied for more than 30 days in the year and a theft occurs during this period.

The household sections may also be subject to excesses for example a theft excess of one thousand Rand, which the insured will bear the cost of himself.

Most household contents policies have warranties on the policy with regards to security and the insured must make sure at all times that he complies with these warranties e.g. burglar bars on all opening windows and security gates.

Make sure you value the contents of your home in total that is how much it would cost you to replace everything in your home if a fire burnt down your entire house. Do not just calculate the value of your goods on those things you think a thief might steal if they managed to break into your house. If you do not value the contents of your home properly this will result in you being under insured and your claim for any loss being penalised by the amount of under insurance.

Also value your goods on a new replacement value basis, that is how much it would cost you to buy the same item (or equivalent item) today.

Once again the policy should be read carefully to make sure you understand what areas are not covered. For example, most household contents policies offer an all risks section. This all risks section covers you for those goods which you normally carry with you and which may be lost outside the home such as video cameras, photographic equipment, golf clubs, firearms, sunglasses and bicycles. These specific items may not be covered unless they are specifically stated on the policy with their values. Make sure you speak to your broker regarding this type of cover to ensure that you are properly insured.

Most Insurance Companies in South Africa only deal through brokers. Make sure that you employ a reputable broker and, if you are paying premiums to this broker directly, that he is permitted by law to accept your premiums. The broker needs to have consent from the insurance company to collect premiums on their behalf and has to buy a guarantee as prescribed in the Insurance Act. Most brokers are members of a Brokers Association and the advantage of this is that if you have a problem with your broker you are able to approach their Association for assistance. There are a few companies on the market, which do direct business with the consumer. The advantage of dealing with these companies is that you will not need to communicate through a middle man but will hear the companies requirements directly from the risk carrier. All telephone conversations with these direct companies will be recorded and it is important that you disclose all material facts to the person asking you the questions.

3.1.3 Motor Insurance

It is important to remember that motor vehicles devaluate every year and your insurance values should be adjusted accordingly. Insurers do not do this automatically because every vehicle devalues at a different rate depending on so many factors, including ones that only you will know like mileage. Insurers are obliged to indemnify you for your loss that is they must put you in the position you were in before the loss occurred. The value of your vehicle is determined by market forces, ask, how much could I trade this vehicle in for today? Insurers pay out more than trade value and generally pay the difference between trade value and retail value. Some insurers pay full retail value. It is important that you amend the insured value every year to properly reflect the true value of your car. Premiums are also calculated on the Sum Insured of a vehicle

Your insurance may only cover driving by yourself or specifically named people, or it may say something like - allow driving by any qualified person with your permission over the age of 25. Every policy is different and your insurer will want to know about anyone who is likely to drive - particularly their age, experience, driving record and occupation.

The type of car you drive also impacts on the cost of your insurance. Popular middle of the range cars are cheaper to repair after an accident than exotic, large, or powerful cars. This impact on the cost of insurance.

Vehicle theft in South Africa is still at relatively high levels and the security fitted to your vehicle also plays an important part in determining premiums. New vehicles manufactured in South Africa generally contain security systems acceptable to insurers but this is not true across the board. Check with SAIA'S VSS System as to whether the security fitted to your vehicle will be regarded as acceptable.

Insurance claims are more frequent in urban areas so people living in the City usually pay more for their insurance than those who live in the country. It is also true that certain areas within the city are higher risks than others so it very important that you inform your insurer of any change of address. The place where the car is kept, e.g. in a lock up garage or in the street, is a rating factor, also tell your insurers if the car is not kept at your home address.

Your policy sets out the uses for which your car is insured. If you have told the insurer that you only use your car for pleasure and for driving to work and back, then this all you will be insured for. If you use the vehicle for business and become involved in an accident then your insurer would be within its rights to repudiate your claim. Read your policy and make sure you are covered for the correct uses and drivers.

You must tell your insurers if you change your car. A premium adjustment may be necessary and your new vehicle will have to be noted on your policy.

Most private motorists have comprehensive insurance with the remainder choosing third party fire and theft, with a very small proportion taking out more limited forms of cover.

- **Third Party**

This covers:

- Liability for injuries to other people, including passengers over and above any compensation paid by the Road Accident Fund.
- Liability for damage to other people's property.
- Liability of passengers for accidents caused by them, over and above the Road Accident Fund.

- **Third Party Fire and Theft**

- As previous plus Fire and theft cover. There may be an "excess" - a part of the cost of the claim for which you are responsible - following an incident of theft or hijacking.

- **Comprehensive**

- As above and previous plus Accidental damage to your own car. There may be an "excess" - part of the cost of the claim for which you are responsible.
- Damage to your vehicle caused by means other than an accident e.g. hail damage.
- A personal accident benefit.
- Certain amounts are paid in the event of the death or specific permanent disablement of the policyholder - and sometimes his or her spouse or family member.

3.1.4 Insurance Levels

Insurers estimate that only two million out of the six million cars on the road are insured. That means if you are involved in an accident that is not your fault the chances are that it will be with an uninsured motorist against whom you will not be able to recover your losses unless you have your own insurance.

Most private motorists have comprehensive insurance with the remainder choosing third party fire and theft, with a very small proportion taking out more limited forms of cover.

3.2 The risks in own life that could be reduced by short term insurance and possible options for cover are compared in terms of benefits and cost.

Once risks have been identified and assessed, all techniques to manage the risk fall into one or more of these four major categories:

- Avoidance (elimination)
- Reduction (mitigation)
- Retention
- Transfer (buying insurance)

Ideal use of these strategies may not be possible. Some of them may involve trade-offs that are not acceptable to the organization or person making the risk management decisions.

- **Risk avoidance**

This includes not performing an activity that could carry risk. An example would be not buying a property or business in order to not take on the liability that comes with it. Another would be not flying in order to not take the risk that the airplane was to be hijacked. Avoidance may seem the answer to all risks, but avoiding risks also means losing out on the potential gain that accepting (retaining) the risk may have allowed. Not entering a business to avoid the risk of loss also avoids the possibility of earning profits.

- **Risk reduction**

This involves methods that reduce the severity of the loss or the likelihood of the loss from occurring. Examples include sprinklers designed to put out a fire to reduce the risk of loss by fire. This method may cause a greater loss by water damage and therefore may not be suitable. Halon fire suppression systems may mitigate that risk, but the cost may be prohibitive as a strategy.

Modern software development methodologies reduce risk by developing and delivering software incrementally. Early methodologies suffered from the fact that they only delivered software in the final phase of development; any problems encountered in earlier phases meant costly rework and often jeopardized the whole project. By developing in iterations, software projects can limit effort wasted to a single iteration.

Outsourcing could be an example of risk reduction if the outsourcer can demonstrate higher capability at managing or reducing risks. In this case companies outsource only some of their departmental needs. For example, a company may outsource only its software development, the manufacturing of hard goods, or customer support needs to another company, while handling the business management itself. This way, the company can concentrate more on business development without having to worry as much about the manufacturing process, managing the development team, or finding a physical location for a call centre.

- **Risk retention**

This involves accepting the loss when it occurs. True self-insurance falls in this category. Risk retention is a viable strategy for small risks where the cost of insuring against the risk would be greater over time than the total losses sustained. All risks that are not avoided or transferred are retained by default. This includes risks that are so large or catastrophic that they either cannot be insured against or the premiums would be infeasible. War is an example since most property and risks are not insured against war, so the loss attributed by war is retained by the insured. Also any amount of potential loss (risk) over the amount insured is retained risk. This may also be acceptable if the chance of a very large loss is small or if the cost to insure for greater coverage amounts is so great it would hinder the goals of the organization too much.

- **Risk transfer**

This refers to causing another party to accept the risk, typically by contract or by hedging. Insurance is one type of risk transfer that uses contracts. Other times it may involve contract language that transfers a risk to another party without the payment of an insurance premium. Liability among construction or other contractors is very often transferred this way. On the other hand, taking offsetting positions in derivatives is typically how firms use hedging to financially manage risk.

Some ways of managing risk fall into multiple categories. Risk retention pools are technically retaining the risk for the group, but spreading it over the whole group involves transfer among individual members of the group. This is different from traditional insurance, in that no premium is exchanged between members of the group up front, but instead losses are assessed to all members of the group.

When assessing the personal circumstances of anyone seeking short term insurance, the insurer will consider the value of the asset, the type of asset, and the owner of the asset. If, for example, a car owner wants to insure a vehicle, the insurer will look at the owner's gender, age, driving experience, driving record, previous insurance claims and installed anti-theft devices, among other things. The reason for this is that the owner's profile will have a strong influence on the likelihood of the risk they underwrite actually happening. Obviously, the greater the risk is perceived to be, the higher the premium will be. That is why it is a good thing to treat your belongings as if they were not insured – even if they are. You will build up a profile as a good risk, in short term insurance terms, and your premiums will remain affordable.

3.3 The need to update short term insurance policies regularly and an indication of the implications of under insurance

The start of a new calendar year is often a good time to take stock of one's personal risk and to ensure that adequate short-term insurance exists to allow continued peace of mind. Consumers should update their policies on a regular basis, at least every year, and use the opportunity to consider all the changes that may have occurred within the year. Life moves so fast that clients often forget to inform insurers about changed circumstances and accumulation of new possessions. And they only realise the impact of this when they have to claim.

By approaching short-term insurance from the perspective of risk management, consumers are in a much better position to evaluate the level of risk that would promote their particular lifestyle choices, and to determine the appropriate cover that matches these choices.

The following is a list of things to help policyholders "rest assured" when reviewing their risk and short-term insurance cover for the year:

1. Check that your policy is paid. Banking details may change and banks may send the payment back. If there is no payment the policy might be cancelled, resulting in no cover.
2. Increase sums insured over time. As you buy more things for your home, or

make alterations or renovations, the insured amount could become inadequate. When there is a loss, you may find that you are underinsured and this could result in further financial loss.

3. Make sure your car is insured correctly along with any extra car accessories you have added.
4. Specify jewellery in the relevant section of your policy.
5. If cover is subject to burglar proofing and security gates, it applies to each and every window and door.
6. If an alarm is applicable on your policy, check that it is in working order and remember to activate it every time you leave the premises. Make sure that the response company does get the signal when the alarm goes off.
7. When applying for a policy, remember to tell the insurance company or broker about anything that might influence the premium or cover. Declare all claims; make sure they know exactly what the vehicle is going to be used for, as well as who the regular driver will be.
8. An insurance policy does not cover all contingencies. Make sure that you know what is and what is not covered.

Recent natural disasters and especially flooding have brought the dreaded message for many insured farm owners “Sir – You are under insured!” This is a major concern for both policyholders and short term insurers.
Many South Africans assume that if they have a home contents insurance policy in place, they will be covered if any of their possessions are lost, stolen or damaged. The same applies to farmers who have insured their farming equipment.
What they don’t realise is that if these possessions are not insured at their replacement value they could have to cough up – even if they have been diligently paying their insurance premiums every month.

According to research conducted by CIB Insurance Solutions (CIB), in 2010, underestimating the replacement value of farming equipment, combined with a failure to regularly review their policies, means that the percentage of South Africa’s farmers who are underinsured could be as high as 70%.

Herewith a few suggestions on how to prevent being under insured:

- Keep in mind that the replacement values of goods change over time.
- If the policy is not reviewed and the higher replacement value is not taken into account, cover becomes inadequate.
- You – or an expert - need to make a realistic estimate of the true replacement value of your insurable assets, equipment etc.
- You also can't insure an item for something that it's not; you can however insure an item for its replacement.
- Update your household inventory list or other list of assets on a regular basis to ensure that any new items are included and to remove items that that you no longer have.
- If you fail to list the values of your new DVD player or TV then you would probably not be insured adequately.
- It also does not make sense to be paying to insure your old washing machine when you have just replaced it with a new one with a higher value.
- Pay special attention to specialized items where specialized insurance is required.

- Farmers are advised to regularly review their policies to ensure that natural disasters such as the recent flooding will not bankrupt them. It is best to contact a specialist agricultural broker, who can do a full risk evaluation and give advice on the precautions, potential threats and the insurance required to cover weather and natural disaster-related claims.

3.4 Ways of reducing insurance premiums and the implications of a decision to spend less on insurance for five different scenarios.

3.4.1 No Claims Bonus

Policyholders with a claim free record normally qualify for a premium discount. Scales do vary but usually range from 15% for one claim free year up to 50% or more after four or five years. It is important to note that even where the loss is not your fault it still affects your No Claims Bonus – note it is a no claims bonus not a no blame bonus.

All insurance policies require you to make sure your car is in a roadworthy condition. If you don't, you may find that your claim will not be paid.

You must tell your insurer of any changes in the details given on your proposal form such as address, occupation, type of car and anything else you may feel is material. Remember making a false statement or withholding information for the purposes of obtaining cheaper insurance may invalidate your policy.

The discount is usually reduced after a claim. Whenever a claim is made under a motor policy, the discount will always be affected unless your insurance company can recover its costs from another party. If your insurer can make a full recovery, your no claim discount may not be affected. Similarly, if you recover all your uninsured losses (such as accidental damage excess) then your discount may not be affected. Sometimes the no claim discount will be reduced at policy renewal time if a claim is expected to come in, or is still waiting to be settled. The discount may be reinstated if your insurer subsequently doesn't have to pay out under the policy.

Module 4

Ways to reduce risk associated with accidents and medical conditions

This Module deals with:

- Facilities available at state medical facilities investigated in terms of availability, cost and adequacy
- Three different medical scheme options compared in term of benefits and cost
- Medical insurance and personal accident insurance as alternatives to medical scheme cover and a decision about the kind of product best suited to own needs
- Ways of reducing the risk in a medical emergency for own situation.
- Events that are not covered in a selected type of medical cover and an indication of the risk that their exclusion implies to financial security

For many decades the vast majority of the South African population has experienced either a denial or violation of fundamental human rights, including rights to health care services. To ensure the realisation of the right of access to health care services as guaranteed in the Constitution of the Republic of South Africa (Act No. 108 of 1996), the Department of Health is committed to upholding, promoting and protecting this right and therefore proclaims this PATIENTS RIGHTS CHARTER as a common standard for achieving the realisation of this right.

4.1 Facilities available at state medical facilities investigated in terms of availability, cost and adequacy

South Africa has a serious shortage of human and financial resources to provide primary healthcare services especially in the historically under-served areas. It is a tedious task to carry out healthcare delivery for the masses without rationalizing human resources in the form of re-allocation and re-deployment of healthcare personnel.

Maximizing efficiency of the nursing staff can decrease the waiting times for patients, resulting in greater patient satisfaction, and improved productivity. There is a need for measurement of the escalating costs in public health sector, to create an economic market-based system that connects value to cost. Assessment of adequacy and efficiency of any workplace becomes an essential element for future planning and program implementation. In the past, nurses have judged their skills performing procedures and their efficiency in carrying out doctors' orders in an organized way for a certain number of patients. Now, in South Africa nurses are the basic unit of the health care system. With the public demand for improvement in health delivery system, evaluation of present methods in terms of patient outcome especially the nursing staff becomes more important than ever before.

4.1.1 Patients' rights

- **Healthy and safe environment**

Everyone has the right to a healthy and safe environment that will ensure their physical and mental health or well-being, including adequate water supply, sanitation and waste disposal as well as protection from all forms of environmental danger, such as pollution, ecological degradation or infection.

- **Participation in decision-making**

Every citizen has the right to participate in the development of health policies and everyone has the right to participate in decision making on matters affecting one's health.

- **Access to health care**

Everyone has the right of access to health care services that include:

- receiving timely emergency care at any health care facility that is open regardless of one's ability to pay;
- treatment and rehabilitation that must be made known to the patient to enable the patient to understand such treatment or rehabilitation and the consequences thereof;
- provision for special needs in the case of new born infants, children, pregnant women, the aged, disabled persons, patients in pain, persons living with HIV or AIDS patients;
- counselling without discrimination, coercion or violence on matters such as reproductive health, cancer or HIV/AIDS;
- palliative care that is affordable and effective in cases of incurable or terminal illness;
- a positive disposition displayed by health care workers that demonstrates courtesy, human dignity, patience, empathy and tolerance.
- health information that includes the availability of health services and how best to use such services and such information shall be in the language understood by the patient.

- **Knowledge of one's health insurance/medical aid scheme**

A member of a health insurance or medical aid scheme is entitled to information about that health insurance or medical aid scheme and to challenge, where necessary, the decisions of such health insurance or medical aid scheme relating to the member.

- **Choice of health services**

Everyone has a right to choose a particular health care for services or a particular health facility for treatment provided that such choice shall not be contrary to the ethical standards applicable to such health care providers or facilities and the choice of facility is in line with prescribed service delivery guidelines.

- **Treated by a named health care provider**

Everyone has a right to know the person that is providing health care and therefore must be attended to by only clearly identified health providers.

- **Confidentiality and privacy**

Information concerning one's health, including information concerning treatment may only be disclosed with informed consent, except when required in terms of any law or an order of court.

- **Informed consent**

Everyone has the right to be given full and accurate information about the nature of one's illnesses, diagnostic procedures, the proposed treatment and the costs involved for one to make a decision that affects any one of these elements.

- **Refusal of treatment**

A person may refuse treatment and such refusal shall be verbal or in writing provided that such refusal does not endanger the health of others.

- **A second opinion**

Everyone has the right to be referred for a second opinion on request to a health provider of one's choice.

- **Continuity of care**

No one shall be abandoned by a health care professional worker or a health facility which initially took responsibility for one's health.

- **Complaints about health services**

Everyone has the right to complain about the health care and to have such complaints investigated and receive a full response on such investigation.

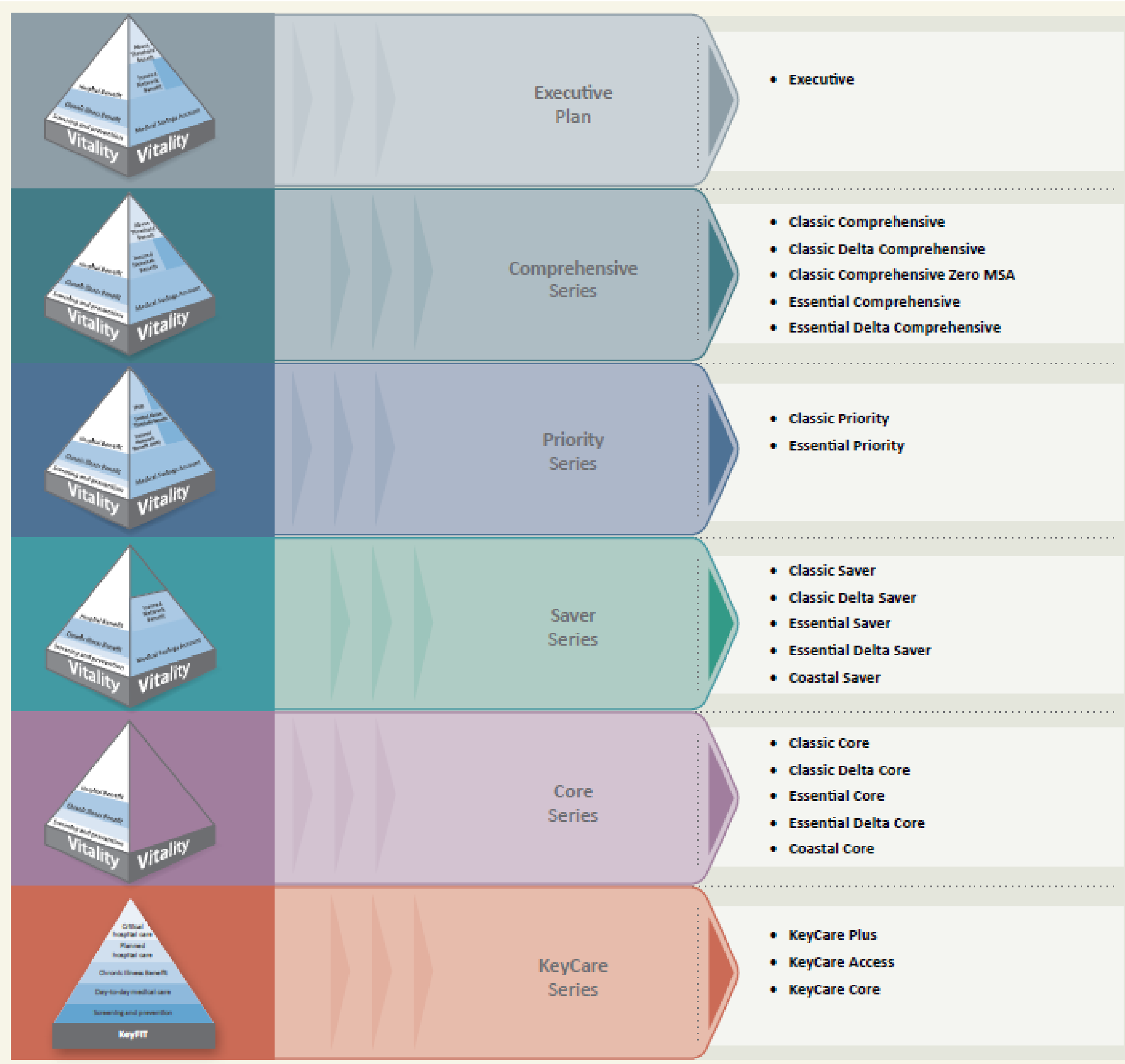
- **Every patient or client has the following responsibilities:**

1. To take care of his or her health.
2. To care for and protect the environment
3. To respect the rights of other patients, health workers and health care providers
4. To utilise the health care system optimally and not to abuse it.
5. To know his or her local health services and what they offer
6. To provide health workers with relevant and accurate information for diagnostic, treatment, rehabilitation or counselling purposes.
7. To advise the health providers of his or her wishes with regard to his or her death

8. To comply with the prescribed treatment and/or rehabilitation procedures
9. To enquire about the related costs of the treatment and/or rehabilitation and to arrange for the payment
10. To take care of health records in his or her possession.

4.2 Three different medical scheme options compared in term of benefits and cost

The following was pulled from Discovery Health's website (www.discovery.co.za/health):



Different options are available on each of the series / levels, each with its own benefits and contributions (cost). Please refer to Handout 1 with all the information on all medical plans available at Discovery Health.

4.3 Medical insurance and personal accident insurance as alternatives to medical scheme cover and a decision about the kind of product best suited to own needs

4.3.1 Medical Insurance

Medical insurance is an insurance product, underwritten by an insurance company and sold to an individual. If you are insured against a specified event in the insurance contract, for a specified amount, that amount will pay out in terms of medical insurance whether you underwent treatment for that condition or not.

Underwriting takes place, just like any other policy where risk is insured. Conversely there are products like medical insurance (or mediclaim as it is commonly referred to), which can add value to an individual's insurance portfolio, but are relatively lesser known.

Medical insurance provides for reimbursement of hospitalization expenses for illnesses/diseases suffered or accidental injuries sustained during the policy period. In other words, subject to the insurance cover and the terms and conditions of the policy, the insurance company undertakes to compensate the policy holder for hospitalization expenses that he incurs, during the policy's term.

To avail of the insurance cover, the policy holder is required to pay a premium. The premium amount depends on factors like the policy holder's age and health. The premium amount rises in line with an increase in the insured's age, among other factors. In case of an existing policy, wherein an insurance claim has not been made, the insurance company compensates the policy holders by offering a higher insurance cover (at the same premium) or by lowering the premium for the subsequent years.

- **Health Insurance Products:**

a) Medical Savings Cards:

Medical savings accounts generally refer to the combination of the purchase of a catastrophic insurance policy (hospital plan) and the establishment of an account from which individuals could draw to pay bills not covered by the policy. Medical savings accounts allow individuals to put funds into tax-free accounts designated for health expenditures. The medical savings account concept derives its name from the fact that members are able to claim back any amount that are not utilised, plus interest. The rationale is to encourage members to seek medical care with careful consideration of the attendant costs. It is argued that under traditional medical options, the tendency for moral hazard – where members use health benefits beyond the point where marginal benefit of care is less than the cost – is greater than with medical savings account plans.

These cards have been sold as stand-alone products, and have become popular with individuals who prefer to self-insure their day-to-day expenses

b) GAP- and/or Top-Up Cover

Many top-up schemes have been sold on the basis of a combination of self-insurance via a savings account, and insurance to cover the more extreme eventualities. Some of these products can contain long-term savings elements and whole-of-life cover. Problems can occur as savings are often not adequate when unforeseen costs arise.

Gap Cover is typically designed to fund a shortfall in the tariff paid by a medical scheme and the price actually charged by the service provider. For these products to achieve this end they must be functionally related to the actual potential loss suffered as a consequence of the cost of a medical service. They consequently have to take cognizance of any change in tariffs.

Gap Cover and Top-up Cover are used to increase the benefits of a member's medical aid scheme; Top-up cover is insurance that can be used to increase cover for in-hospital expenses over and above what the medical scheme provides, and gap cover covers the difference between the rates that the scheme pays and what doctors charge for in-hospital procedures. Both policies pay a set amount stated in the policy.

c) Hospital Plans

These products include hospital cash plans, where a daily cash benefit is paid out for every day of a hospital stay, differentiated by the kind of ward occupied.

Hospital benefits allow discretion between a basic maximum and a minimum benefit. This basic benefit is increased for use of an intensive care unit of high care unit by a standard multiple (e.g. 2.5 times the basic daily benefit).

The hospital benefit triggers are identical to those of a medical scheme in that proof is required that a cost in relation to a specified medical service has been incurred. All claims are based on the submission of relevant hospital accounts.

It has also become a practice that private hospitals demand that hospital policies be ceded as security. The fact that these policies can be ceded, permits the insurer to directly reimburse the provider. This contravenes the Long- and Short-term Insurance Acts.

d) Dread Disease and Debility Cover

Dread disease policies can also fall into the category of top-up cover. Such an insurance plan pays out a cash benefit, of various forms, after being diagnosed with one or other specified condition. Conditions such as heart attack, stroke, cancer, or kidney failure can be covered. Dread disease policies can include certain chronic conditions, although this has not been common. These policies can also behave as accelerated death benefits

e) Premium Waiver

This is a benefit attached to a contract under which regular premiums are payable. In the event of sickness or disability or, in some cases, unemployment, the premium payable under the contract, including the premium for the waiver of the premium, is waived.

i. PREFUNDING:

The provision of post-retirement medical benefits has recently gained much attention in the media. Awareness of this issue is rising at both corporate and an individual level. In the past little attention was paid to prefunding post-retirement medical benefits. As a result employers and medical schemes in South Africa are currently carrying a fairly large pensioner population who are on the whole unfunded. The younger members are showing increasing resistance to paying for the older members. Forcing them to do so may result in younger members opting out of the medical aid scheme environment entirely.

Companies are slowly becoming aware of the extent of their post retirement liabilities in respect of their future pensioners and are often surprised at the magnitude of their liability.

An Old Mutual survey shows that about 5% of employers are negotiating existing job contracts to offer staff cash in lieu of medical aid contributions. Many companies are rewording their job contracts for new employees to make it clear that post-retirement medical scheme contributions will not be covered.

4.3.2 Personal Accident Insurance

Personal accident insurance is an effective way to protect your future financial security. If you are seriously injured as a result of violent and external means and are no longer able to earn an income, the impact on your personal finances can be devastating. A personal accident insurance policy will compensate you if you are injured as the result of an accident. Personal accident cover is therefore a way to ensure that you and your dependents will be provided for if you find yourself unable to work, or saddled with costly medical expenses.

4.4 Ways of reducing the risk in a medical emergency for own situation.

Measures must be taken to prevent hazards from creating risks or to lessen the distribution, intensity or severity of hazards. These measures include flood mitigation works and appropriate land-use planning. They also include vulnerability reduction measures such as awareness raising, improving community health security, and relocation or protection of vulnerable populations or structures.

4.5 Events that are not covered in a selected type of medical cover and an indication of the risk that their exclusion implies to financial security

Choosing a medical scheme that works for you should be simple. Whether you need a new, affordable and reliable medical aid or some much needed cash in your pocket should you need to spend some time in hospital. If you have health cover, there may be times that your bills will not be fully covered by your medical aid.

The benefits and events that will be covered vary depending from medical aid and specific medical plan that you are on. Some medical aids choose to exclude the treatment of some conditions if the condition was specified before being a member of the particular medical aid.

Module 5

The financial consequences of contravening the law

This Module deals with:

- Behaviour that could result in a fine due to contravention of a law or regulation and the possible financial or other consequences presented in a table

5.1 Behaviour that could result in a fine due to contravention of a law or regulation and the possible financial or other consequences

The call from the Road Traffic Management Corporation (RTMC) to suspend drivers' licenses of motorists convicted of certain traffic offices – including driving under the influence of alcohol or other narcotic substances, reckless, negligent or inconsiderate driving and excessive speeding – places offenders at risk of insurance claim repudiation should they be involved in an accident while their licenses are suspended.

Motor insurance cover is immediately invalidated when the driver no longer has a valid driver's license. Should the motorist be caught driving with a suspended drivers license, not only are they partaking in a criminal offence, but they are placing themselves at risk of further financial strain, in addition to the costs associated with re-testing for both their learners and driving licenses.

According to the RTMC, since January 2012 a staggering 5 000 drivers have been arrested for various traffic offences.

The programme proposed by the RTMC is a necessary step towards reducing the sheer volume of fatal accidents on South Africa's roads each year and could ultimately benefit consumers in the future through lower insurance premiums, should the project be successful in reducing the number of motor vehicle accidents.

A decline in motor vehicle accidents could equate to fewer insurance claims, therefore improving the risk profile of South African motorists. There are many factors that are taken into account when calculating the premium on a motor vehicle, however, if we see fewer accidents on our roads then it is highly probable that we could see a reduction in motor insurance premiums in the future.

However, drivers must also be aware of the additional insurance repercussions following the end of their driver's license suspension.

Offenders are likely to struggle to find an insurer who will take on the risk of insuring them if their driver's license has been suspended in the past, as their risk profile will be worse than ordinary consumers. Those who are fortunate enough to find an insurance provider will most likely suffer the consequences of higher than average premiums or excess due to the increased insurance risk they present.

While it may take some time for South Africans to get used to these changes, they are ultimately a positive step in combating what is a very serious problem. It is actually quite simple – motorists must learn to obey the laws of the land when they drive to avoid financial and legal repercussions.

The following table summarises the different behaviours that could result in a fine and the possible consequences of each:

Behaviour	Possible fine	Consequence
Driving under the influence of alcohol or other narcotic substances	Suspension of drivers' license	• Possible accident • Motor insurance cover immediately invalidated • Difficulty to find an insurance company willing to insure the individual or • Higher than average insurance premiums
Reckless driving	Suspension of drivers' license	• Possible accident • Motor insurance cover immediately invalidated • Difficulty to find an insurance company willing to insure the individual or • Higher than average insurance premiums
Negligent or inconsiderate driving	Suspension of drivers' license	• Possible accident • Motor insurance cover immediately invalidated • Difficulty to find an insurance company willing to insure the individual or • Higher than average insurance premiums
Excessive speeding	Suspension of drivers' license	• Possible accident • Motor insurance cover immediately invalidated • Difficulty to find an insurance company willing to insure the individual or • Higher than average insurance premiums
Driving with a suspended driver's license	Criminal offence – jail time	• Financial implication in terms of re-testing for learners' and drivers' license • Possible prison time

Bibliography

INSETA Learning Material, 2008
http://www.thefreedictionary.com/utility
http://www.water-recycle.co.za/2010/08/25/cost-of-water-cape-town/
www.telkom.co.za
www.neotel.co.za
http://www.buffalocity.gov.za
http://www.homemakersonline.co.za/features/31/how-to-save-electricity-in-your-home
http://www.capewatersolutions.co.za/2010/02/06/typical-household-water-consumption/