

**RISK MANAGEMENT IN HEALTH CARE  
IN SOUTH AFRICA**

by

**MELANIE SANDRA FERNANDES DA COSTA**

**Submitted in fulfillment of the requirements  
for the degree of**

**MASTER OF COMMERCE**

In the subject

**BUSINESS MANAGEMENT**

At the

**UNIVERSITY OF SOUTH AFRICA**

**PROFESSOR G. DU TOIT**

**March 2000**

## **SUMMARY**

Risk management strategy is a broad discipline aimed at identifying, evaluating and handling risks by both physical and financial means. The medical aid industry in South Africa has experienced a disproportionate increase in expenditure relative to the overall economic growth. These cost pressures have placed restraints on their ability to obtain new members, which is vital when subsidizing higher risks with younger healthier members, and has resulted in losses for many schemes. Compounding the problem has been political and regulatory health care reforms as well as technological advances, which have initiated a complete restructure of the industry. This dissertation reviews the risk management strategies implemented by medical insurers in South Africa. An analysis of alternate risk management strategies is taken with the view of recommending a tentative means of making medical aids more efficient in an increasingly difficult market.

## **DECLARATION**

I declare that “Risk management in health care in South Africa” is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

## **ACKNOWLEDGEMENTS**

It is with the greatest of gratitude that I acknowledge the assistance of Irene Moutafis for patiently going through this research and giving me valuable comments and to Professor Gawie Du Toit who patiently guided me in formulating ideas, labouriously prodded through my research drafts but more than anything for encouraging me.

## **PLAN OF THE REPORT**

SUMMARY

DECLARATION

ACKNOWLEDGEMENT

## **CHAPTER 1: NATURE OF THE RESEARCH**

|       |                            |    |
|-------|----------------------------|----|
| 1.1   | Background of the research | 14 |
| 1.2   | Problem formation          | 17 |
| 1.3   | Objectives                 | 18 |
| 1.4   | Methodology                | 19 |
| 1.4.1 | Sample                     | 19 |
| 1.5   | Limitations of the study   | 21 |
| 1.6   | Plan of the study          | 22 |

## **CHAPTER 2: THE RISK MANAGEMENT PROCESS**

|       |                              |    |
|-------|------------------------------|----|
| 2.0   | Introduction                 | 25 |
| 2.1   | Definition of risk           | 28 |
| 2.1.1 | Probability                  | 28 |
| 2.1.2 | Variation                    | 30 |
| 2.1.3 | Uncertainty                  | 30 |
| 2.1.4 | Degree of risk               | 31 |
| 2.2   | Classification of risk       | 34 |
| 2.2.1 | Dynamic or static risk       | 34 |
| 2.2.2 | Pure versus speculative risk | 35 |

|           |                                       |    |
|-----------|---------------------------------------|----|
| 2.2.3     | Fundamental and particular risks      | 35 |
| 2.3       | General principles of risk management | 36 |
| 2.3.1     | Determining objectives                | 36 |
| 2.3.2     | Risk identification                   | 38 |
| 2.3.2.1   | Tools in risk identification          | 39 |
| 2.3.2.2   | Risk identification techniques        | 41 |
| 2.3.3     | Risk evaluation                       | 43 |
| 2.3.4     | Risk treatment                        | 46 |
| 2.3.4.1   | Risk control techniques               | 47 |
| 2.3.4.1.1 | Specialized loss control techniques   | 49 |
| 2.3.4.1.2 | Risk financing techniques             | 51 |
| 2.3.4.2   | Insurance                             | 51 |
| 2.3.4.2.1 | Risk retention                        | 54 |
| 2.4       | Programme administration              | 55 |
| 2.5       | Conclusion                            | 55 |

### **CHAPTER 3: MEDICAL INSURANCE IN SOUTH AFRICA**

|         |                                                                |    |
|---------|----------------------------------------------------------------|----|
| 3.0     | Introduction                                                   | 57 |
| 3.1     | The South African health care environment                      | 59 |
| 3.1.1   | Problems in health care delivery                               | 63 |
| 3.1.2   | Private health care sector                                     | 64 |
| 3.1.2.1 | Summary                                                        | 67 |
| 3.2     | The medical aid industry, background, progression and problems | 68 |
| 3.2.1   | The medical aid industry                                       | 68 |
| 3.2.1.1 | Medical aid schemes                                            | 69 |

|           |                                                                                  |    |
|-----------|----------------------------------------------------------------------------------|----|
| 3.2.1.2   | Medical benefit schemes                                                          | 70 |
| 3.2.1.3   | Exempted schemes                                                                 | 71 |
| 3.2.1.    | Medical Schemes Act                                                              | 73 |
| 3.2.2.1   | Benefits covered                                                                 | 47 |
| 3.2.2.2   | Tariff legislati                                                                 | 76 |
| 3.2.2.3   | The Browne Commission                                                            | 78 |
| 3.2.2.4   | 1989 Amendments                                                                  | 79 |
| 3.2.2.4.1 | Payment of accounts                                                              | 79 |
| 3.2.2.4.2 | Cross-subsidisation versus risk rating                                           | 80 |
| 3.2.2.4.3 | The role of the insurer in health care                                           | 81 |
| 3.3       | Problems that have plagued the industry                                          | 82 |
| 3.3.1     | Rising costs of health care                                                      | 82 |
| 3.3.1.1   | Third party payment and the fee-for-service system                               | 89 |
| 3.3.1.2   | Provider reimbursement                                                           | 87 |
| 3.3.2     | Other problems that have plagued this industry including legislative constraints | 88 |
| 3.4       | Conclusion                                                                       | 92 |

#### **CHAPTER 4: RISK MANAGEMENT STRATEGY IN HEALTH CARE FUNDING**

|         |                                                        |    |
|---------|--------------------------------------------------------|----|
| 4.0     | Introduction                                           | 93 |
| 4.1     | Risk management principles in the medical aid industry | 96 |
| 4.1.1   | First generation product                               | 98 |
| 4.1.1.1 | Tradition medical schemes                              | 98 |

|           |                                        |     |
|-----------|----------------------------------------|-----|
| 4.1.2     | Second generation products             | 99  |
| 4.1.2.1   | Co-payment schemes and deductibles     | 100 |
| 4.1.2.1.1 | Co-payment                             | 100 |
| 4.1.2.1.2 | Deductibles                            | 100 |
| 4.1.2.2.  | Bonus and rebate options               | 101 |
| 4.1.2.2.1 | The dynamic bonus system               | 101 |
| 4.1.2.2.2 | Fixed rebates for no claims            | 102 |
| 4.1.2.2.3 | Relative success of new scheme options | 103 |
| 4.1.2.2.4 | Summary                                | 105 |
| 4.1.3     | Third generation products              | 108 |
| 4.1.3.1   | Medical savings accounts               | 108 |
| 4.1.3.2   | Claims management                      | 114 |
| 4.1.4     | Fourth generation products             | 115 |
| 4.1.4.1   | Managed healthcare overview            | 115 |
| 4.2       | Conclusion                             | 117 |

## **CHAPTER 5: MANAGED HEALTHCARE**

|         |                                     |     |
|---------|-------------------------------------|-----|
| 5.0     | Introduction                        | 120 |
| 5.1     | The nature of managed care          | 122 |
| 5.2     | Insurance principles                | 125 |
| 5.3     | Utilization management              | 126 |
| 5.3.1   | Utilization review                  | 127 |
| 5.3.1.1 | Utilization review in hospital care | 129 |
| 5.3.1.2 | Practical implications              | 130 |
| 5.3.2   | Case management                     | 130 |
| 5.3.3   | Summary                             | 131 |



|          |                                                                  |     |
|----------|------------------------------------------------------------------|-----|
| 5.4      | Cost containment                                                 | 132 |
| 5.4.1    | Shortcomings of managed healthcare in achieving cost containment | 134 |
| 5.4.1.1  | Administrative costs and requirement                             | 136 |
| 5.4.1.2  | Duplication of facilities and equipment                          | 137 |
| 5.5      | Quality assurance                                                | 138 |
| 5.5.1    | Treatment guidelines                                             | 139 |
| 5.6      | Managed care models                                              | 143 |
| 5.6.1    | Independent practitioners associations                           | 144 |
| 5.6.2    | Preferred provider organisations                                 | 145 |
| 5.6.3    | Exclusive provider organisations                                 | 145 |
| 5.6.4    | Point of service arrangement                                     | 146 |
| 5.6.5    | Health maintenance organisations                                 | 146 |
| 5.7      | Remuneration system                                              | 148 |
| 5.8      | Formularies                                                      | 154 |
| 5.9      | Shortfalls of managed healthcare                                 | 156 |
| 5.10     | Experiences in the United States                                 | 157 |
| 5.11     | Managed care in the South African context                        | 160 |
| 5.11.1   | Cost savings                                                     | 160 |
| 5.11.2   | Problems in implementation in South Africa                       | 163 |
| 5.11.2.1 | Administrative costs and capacity                                | 163 |
| 5.11.2.2 | Lack of competition                                              | 166 |
| 5.11.2.3 | Quality control                                                  | 167 |
| 5.11.2.4 | Curative bias                                                    | 167 |
| 5.12     | Conclusion                                                       | 168 |

**CHAPTER 6: DRAFT POLICY :REGULATIONS UNDER THE  
MEDICAL SCHEMES ACTS, 1998 (ACT NO. 131 OF 1998)**

|                                                 |                                                                             |     |
|-------------------------------------------------|-----------------------------------------------------------------------------|-----|
| 6.0                                             | Introduction                                                                | 170 |
| 6.1                                             | Review of current health care environment                                   | 171 |
| 6.2                                             | Community rating                                                            | 173 |
| 6.3                                             | Demarcation between business of medical<br>schemes and commercial insurance | 178 |
| 6.3.1                                           | Proposed changes                                                            | 180 |
| 6.4                                             | Medical savings accounts                                                    | 181 |
| 6.5                                             | Prescribed minimum benefits                                                 | 182 |
| 6.6                                             | Multiple benefit options within schemes                                     | 183 |
| 6.7                                             | Limit on tax deductions                                                     | 184 |
| 6.8                                             | Reserve requirements                                                        | 184 |
| 6.9                                             | Managed health care                                                         | 185 |
| 6.10                                            | Conclusion                                                                  | 185 |
| APPENDIX 1: Government Gazette No. R.599. (6).  |                                                                             |     |
|                                                 | Provision of medical personal savings accounts                              | 187 |
| APPENDIX 2: Government Gazette No. R.599. (13). |                                                                             |     |
|                                                 | Conditions doe providing managed healthcare                                 | 189 |

**CHAPTER 7: METHODOLOGY**

|     |                   |     |
|-----|-------------------|-----|
| 7.0 | Introduction      | 195 |
| 7.1 | Sample            | 196 |
| 7.2 | Research design   | 199 |
| 7.3 | Company overviews | 203 |

|                                           |     |
|-------------------------------------------|-----|
| APPENDIX 1: Medical Aid Population, 1997. | 238 |
| APPENDIX 2: Interview Framework           | 243 |

## **CHAPTER 8: RESULTS**

|     |                  |     |
|-----|------------------|-----|
| 8.1 | Results of study | 251 |
| 8.2 | Summary          | 302 |

## **CHAPTER 9: CONCLUSION AND RECOMMENDATIONS**

|     |                                                  |     |
|-----|--------------------------------------------------|-----|
| 9.0 | Introduction                                     | 306 |
| 9.1 | Risk management                                  | 305 |
| 9.2 | Evaluation of alternative health care strategies | 307 |
| 9.3 | Areas for further research                       | 310 |

## **BIBLIOGRAPHY**

## **GLOSSARY**

### ***Administrators***

Medical scheme administrators are responsible for the day-to-day running of the scheme, for monitoring its financial viability, and for executing policy.

### ***Capitation***

A set price paid to a health care service provider for having a medical aid member on their books irrespective of the services rendered or to be rendered to such patients.

### ***Case Management***

The management of the delivery of health care. The aim is to contain the costs while allowing for the provision of the best possible care for the given ailment.

### ***Co-insurance***

The portion of covered health care costs for which the member has financial responsibility, usually according to a fixed percentage. Often co-insurance applies after first meeting a deductible requirement.

### ***Community Rating***

When a medical scheme prices risk premiums according to the risk of a sample population and not the risk of any particular individual.

### ***Co-Payment***

A cost sharing arrangement in which a plan member pays a specified charge for a specified service (e.g. R5 for a consultation). The member is usually responsible for payment at the time the service is rendered. The amount paid is nominal in order to avoid becoming a barrier to care. It does not vary with the cost of the service, unlike co-insurance, which is based on some percentage of cost.

***Exclusive Provider Organisation***

The medical aid member is obliged to use the medical schemes set network. If the member chooses otherwise he/she is responsible to settle the account.

***Fee - For - Service (FFS)***

Medical schemes pay according to the number of services provided.

***Gatekeeper***

General practitioners are often referred to as gatekeepers as they are responsible for channelling patients to specialists or specific hospitals and feeding information back to the medical schemes.

***Generic Drug***

A chemically equivalent copy of a brand-name drug. A generic is typically less expensive.

***Health Maintenance Organisation (HMO)***

An arrangement between health fund administrator and provider of health care for the purpose of delivering health services to an enrolled population for a prepaid fee. The basic HMO models include: staff model, group model, individual practice association and network model.

***Independent Practitioner Association (IPA)***

A forum representing doctors with intention to negotiate on their behalf with medical schemes and managed care organisations to provide comprehensive health care.

***Managed Healthcare (MHC)***

MHC can best be described as a management process made between health care consumers (or their agents) and health care providers.

***Medical Scheme***

Any arrangement whose purpose is to finance and pay health care expenses. Also referred to as a medical aid.

***Peer Review***

The mechanism used by medical staff to evaluate the quality of total health care provided by medical staff with equivalent training.

***Per Case Reimbursement***

Fixed-fee hospital reimbursement, per hospital case regardless of duration of stay.

***Per Diem Reimbursement***

Reimbursement of a hospital bill based on a set rate per day rather than on charges.

***Preventative Care***

Comprehensive care emphasising prevention, early detection and early treatment of conditions.

***Preferred Provider Network***

A number of providers who have become a managed care organisation's pool of providers to whom the organisation directs patients in return for reduced health care costs. The relationship is contractually supported.

***Preferred Provider Organisation (PPO)***

A plan in which contracts are established with providers of medical care. Providers under such contracts are referred to as preferred providers. Medical scheme members have incentives to use preferred providers but are generally also allowed benefits from non-participating providers.

***Quality Assurance***

A formal set of activities to review and affect the quality of services provided. Quality assurance includes quality assessment and corrective action to remedy any deficiencies identified in the quality of direct patient, administrative and support services.

***Representative Association of Medical Schemes (RAMS)***

RAMS, a statutory body created in terms of the Medical Schemes Act to represent the interest of schemes and to determine scale of benefits for various services.

### ***Registrar of Medical Schemes***

The official appointed in terms of the Medical Schemes Act, responsible for the registration of medical schemes and their rules and the application of the Acts and these rules.

### ***Risk Pool***

A defined account (e.g. defined by size, geographical location, etc) to which revenue and expenses are posted. It is a method of sharing and managing the risk between the providers and funders of health care in a capitation payment system.

### ***Risk Rating***

The process of setting member contribution rates based partially, or wholly on previous claims experience for a specific member group.

### ***Third-party Payment***

An organisation that pays for health services rendered on behalf of the patient. These sources of funds are usually based on a system of contributions. Typical third-party payers in South Africa are medical schemes and health insurance companies.

### ***Utilization Review***



The process of evaluating the necessity, appropriateness and efficiency of health care services. Information gathered from patients and health care providers is reviewed on a prospective, concurrent or retrospective basis to determine whether it meets established guidelines and criteria.

## **CHAPTER 1: NATURE OF THE RESEARCH**

### **1.1 BACKGROUND OF THE RESEARCH**

Over the last decade, health care expenditure in South Africa has increased faster than overall economic growth. In the five years to 1995 medical costs rose by an average of 20% a year. The cumulative inflation rate for specialists, private hospitals and medication rose in this period by 201%, 270% and 185%, respectively. In contrast, the cumulative increase in the overall national inflation rate was 71% (F & T weekly, 6 March 1998:10). If this is compared with the relatively minor annual increases of between 8% and 11% in salaries and wages, it is clear why employers are concerned about the future affordability of health care – not to mention retired people whose benefits have not been properly funded for in advance.

Much of the growth in this sector has been a consequence of certain unique structural characteristics as well as market failure in the production and consumption of health care (Magennis 1991:1). Although health care costs have been escalating in both the public and the private sector it has been more pronounced in the private sector (Magennis 1991:1). The rapidly rising costs make private health care increasingly unaffordable. The success of any medical scheme is largely determined by the measure to which the increasing number of high risk categories (aged and infirmed) are subsidised by an increasing number of young and healthy people. For medical schemes, the same cost pressures

as referred to above place restraints on their ability to obtain new membership, and has led to losses for many schemes.

Calculations done at the University of Pretoria five years ago indicate that the obligations of medical aids to pensioners are equivalent to 10 times the funds' current reserves (F&TW 19 February, 1993). It is these reserves which lead to the realisation that medical-aid funds do not apply healthy underwriting and risk-management principles.

As a consequence of the problems outlined above, the medical aid system, which constitutes the largest portion of the private health sector, is in danger of collapsing.

Studies such as that of Duncan, Ginter and Swayne (1995:1) cite a lack of strategic thinking and generally poor management as the most important problems facing the health care industry. Duncan et al (1995:1) went on to say that health care has difficulty in dealing with a dynamic environment, holding down costs, providing universal access, defining quality, and balancing capacity and demand. Not coincidentally, the health care sector has been slow to adopt modern management methods, particularly strategic and risk management.

Compounding the problems associated with rapid growth, the health care industry has experienced significant environmental change. Political and regulatory "health care reform" changes have initiated a complete restructure of the industry. Technological advances have continually and rapidly evolved the "state of the art". The economy and

competition have forever altered the vision and mission of many of the industry's institutions. In some areas health care professionals are in short supply, especially in state employment and many of those have become disenchanted.

Today, no decision-making environment is more difficult or complex than that of health care given its social, political and economic role which often contradict or whose ends are juxtaposed. The industry presents a truly unfamiliar, unexpected, ambiguous, and uncertain environment. Dramatic change will continue to take place within the technological, social, political, regulatory, competitive and economic context of health care delivery. Today health care organisations that do not have a clear strategy are doomed to mediocrity at best - and failure at worst.

Through the disciplines of risk management it is assumed that an organisation is able to predict and control the effect of future events on its operations. Risk management is concerned with identifying, evaluating and controlling risks (Bannister 1989:1). Risk management is seen as a means of identifying and handling unforeseen events, which could impinge on the ability of an organisation to achieve its objectives. A health provider's future fiscal strength will be greatly enhanced if it can minimise its financial risks and liabilities. The factors that mandate risk management programmes in medical schemes today will have an even greater impact in the future.

Risk management is aimed at evaluating and handling risk by both physical and financial means. As a management function, risk management should form part of the formulation of the strategy of the organisation, strategy being a means of setting direction in the long term. Once formulated, the strategy must be implemented.

This dissertation reviews the concept of risk management and tools of implementation with the view to determining to what extent risk management has been implemented in the South African medical aid industry. This dissertation will explore new generation risk management tools to determine the better alternative.

## 1.2 **PROBLEM FORMATION**

Medical inflation has consistently outpaced general inflation: in the 5 years to 1995 the cumulative inflation for private hospitals for example was 270%, this compares with 71% of overall national inflation (F&T Weekly March 1998:10). Although health care costs have escalated in both the public as well as private sector it has been more pronounced in the latter. Cost pressures have restrained medical schemes from obtaining new membership and have led to large losses for many schemes, even resulting in insolvency<sup>1</sup>. This statement is better illustrated by looking at the annual income of medical schemes for the period 1983-1995, which increased twelve-fold yet, membership in the same period only increased by 30%. Hence the increase in income was

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<sup>1</sup> In 1980 there were a total of 289 schemes while in the latest report from the Registrar of Medical Schemes (1996:1) there were 176 schemes.

rather a factor of rising costs than that of rising membership (Registrar of medical Schemes 1995: Annexure A).

The extent of risk management application historically in the medical aid industry is however questionable. As a generalisation, with a few exceptions, the full extent of risk management application has been limited to its most simplistic form i.e. risk pooling.

This research will explore the medical funder industry in South Africa, within the legislative background, to identify problems plaguing the industry in the context of risk management. It will explore possible risk management applications to derive solutions to the industry's problems with specific reference to co-insurance plans, deductibles, bonus and rebate options, claims management, and new generation tools such as medical savings accounts and/or managed health care.

### **1.3 OBJECTIVE**

The primary objective of this research is to determine to what extent risk management has been implemented in the South African Medical Aid industry, from risk identification through to risk financing.

The secondary objective is to evaluate alternative strategies from a risk management perspective and to select the most appropriate strategy.

### **1.4 METHODOLOGY**

To achieve the above objectives literature relating to risk management and the formulation and implementation of a managed health care strategy will be reviewed. This theory will be translated into a semi-structured interview framework with the aim of assessing the extent of risk management implementation in the medical aid industry in South Africa. The questionnaire will also be a fielding ground for exploring alternative tools to managing risk in health care funding.

#### *1.4.1 SAMPLE*

In order to get an unbiased image of the whole population a random sample of the medical aid population was taken.

The members of the sample were interviewed and the Delphi technique applied. The Delphi technique, in its simplest form, eliminates committee activity among the experts altogether and replaces it with a carefully designed program of sequential individual interrogations (usually best conducted by questionnaires) interspersed with information and opinion feedback.

The principles involved in the Delphi Technique include:

- (1) Sending out a comprehensive questionnaire which can also be asked in an interview,
- (2) A follow-up questionnaire is fed back to the respondents, with a summary of the distribution of these responses by stating the average answer. The respondent is then asked to reconsider his previous answer and revise it if he/she so desires. If his/her response is extremely contrary to the first answer, he/she is to be asked to state his/her reason. Placing the onus of justifying relatively extreme answers on the respondents has the effect of causing those without strong convictions to move their estimates closer to the median, while those who feel that their argument for a “deviationist” opinion tended to retain their original estimate and defend it. The median of these final responses could then be taken as representing the nearest thing to a group consensus

On completion of all interviews, notes taken are reviewed. These are compared with the concepts referred to in the literature to see if they apply or whether there are other considerations. The risk management alternatives are examined.

Over and above the empirical work done on the sample population insight was also drawn from a brief analysis of existing managed healthcare players falling outside the sample population. The purpose of which was to provide a relative basis of comparison, of tradition



medical schemes versus managed health care, on how far down the road both models are on the topic of risk management. One can then extrapolate how advanced the South African medical aid industry is with respect to managing health care and its risks.

### **1.5 LIMITATIONS OF THE STUDY**

For the purpose of this report principle number (2) in the Delphi technique i.e. follow-up contact with the respondents, will not be strictly adhered to given that the contact person in each organisation is either the Chief Executive Officer or the Managing Director, both of which run on busy schedules. It is difficult to get appointments with such individuals. It is thus vital to get the most out of the one session with the individual. Further communications were conducted telephonically.

Given that the industry is still exploring many of the issues touched on in this research, it was clear that many of the people interviewed had broad and varying definitions of certain topics explored such as risk management, managed care and case management.

## **1.6 PLAN OF THE STUDY**

### ***Chapter 1: Nature of the research***

An analysis of the current South African health care environment, more specifically funding of health care, in an effort to extrapolate problems plaguing the industry. This chapter sets out the objectives of the research study as well as the planned methodology to achieve this end.

### ***Chapter 2: Risk Management Process***

Risk can be analysed and effectively dealt with by using methods advocated by the discipline of risk management. In this section the nature of risk management and its place in the overall strategy for medical funders is explored.

### ***Chapter 3: Medical Insurance in South Africa***

Health funding works on the basic principles of insurance, which is a mechanism permitting the shifting of a potentially unbearable loss cost from individuals to a pool composed of many individuals. The foundation of insurance is risk management.

### ***Chapter 4: Risk Management Strategy in Health Care Funding***

This chapter reviews various risk management alternatives including: co-insurance plans, bonus and rebate options, claims management, medical savings accounts and managed health care, to see which alternatives best address the principles of risk management.

### ***Chapter 5: Managed Healthcare***

This chapter defines and outlines the components of a managed healthcare strategy. It takes a closer look at the role of utilization management. A synopsis of managed health care in the United States is also given.

### ***Chapter 6: Draft policy on Health Funding in South Africa***

The objective of the proposals is, by and large, to improve the affordability of and access to private health care through medical schemes (Draft Policy Document 1997:1). An important element of these reforms would be to reinforce the requirement of community rating within medical schemes. The core of a community rated system is such that people should not be discriminated against in obtaining medical schemes cover on the basis of their health risks. This goal in itself flies in the face of risk management principles and goals. There has been an outcry from the health insurance industry and this chapter will deluge more on the proposals set by government as well as industry views.

### ***Chapter 7: Methodology***

This chapter explores the methodology behind the research design. It delves into the sample population and elaborates on how the explorative research will be conducted with particular reference to the qualitative framework and the Delphi technique.

A brief company overview of each company in the sample population is given. For the purpose of comparison existing managed healthcare players are also briefly covered.

### ***Chapter 8: Results***

This chapter comprises the questionnaire, company research and the results of the empirical study.

### ***Chapter 9: Conclusion and Recommendations***

A conclusion to the study is drawn.

### ***Bibliography.***

## **CHAPTER 2: THE RISK MANAGEMENT PROCESS**

### **2.0 INTRODUCTION**

Strategic management and its application to medical insurers could be hampered through the manifestation of uncertain events, preventing them from achieving their aims. This risk can be analysed and effectively dealt with by using methods advocated by the disciplines of risk management. This chapter considers the nature of risk management and its place in the overall strategy for medical funders.

Risk is a normal part of the operations of an organisation (Baird & Thomas 1990:35). Risk is potential variation in outcome. When risk is present, the outcome cannot be forecast precisely. The presence of risk gives rise to uncertainty. The level of uncertainty depends on the amount and type of information available to identify possible outcomes. The reduction of uncertainty has economic value, and information can reduce uncertainty (Williams, Smith and Young 1995:12).

Johnson & Scholes (1993:289) argue that risk should be assessed as part of an evaluation of specific strategic options. Thus for example, financial risks of a particular strategic option should be considered as part of the evaluation of a strategy, as there is a clear link between risk and strategy when considering the financing of a particular project. Johnson & Scholes (1993:292) recommend the analysis of the risks involved in the assumptions made, in considering future markets or other uncertain variables, and as part of the process of evaluating strategic options.

The outcome of a strategy is uncertain in that the assumptions made in the formulation of the strategy may be incorrect or the expected results not forthcoming. This may be caused by various events including, in the case of medical funders, an irrational inflation in the costs of health care claims. Thus strategy and risk are interwoven which leads to the conclusion that risk needs to be managed as part of the strategy of an organisation.

When a strategy is formulated by medical aids they run the risk that the overall goal is not achieved, that they may not be able to meet the expectation of their stakeholders or match their resources to the changing environment. In order to reduce this possibility a strategy should be developed which takes into consideration these concerns. Risk management is a process, which allows management to identify, evaluate and control the events, which could possibly adversely affect the achievement of their objectives.

There are many factors, which may detract from an organisation achieving its goals. One such factor is the possibility of legal action being pursued by an employee. This leads to unforeseen costs being incurred by way of compensation. Further expenses such as legal fees and other costs in both financial and human terms, some of which are difficult to quantify, will also be experienced. These would contribute towards a reduction in organisational achievements and also, possibly, loss of reputation. In some cases the cost could be large enough to affect the survival of the organisation or lead to a failure in the overall strategy.

Resources are needed to achieve the objectives of an organisation and if some of these have to be diverted to meet the cost of increased reinsurance premiums for example, this could lead to failure in the strategy through lack of resources.

Unusually high claims in the medical aid industry, as a result of either unexpected chronic illnesses or moral hazard in claiming, can have the affect of: increasing the cost of insuring; impact the possibility of obtaining reinsurance as well as the overall functioning of the firm, if care is not taken to carry out an investigation following one such claim.

Principles of risk management i.e. identifying, evaluating and handling risks, which will be further defined within the context of this chapter, are by the very nature of the business of insuring medical costs already applicable to the medical aid industry. This research will however analyse to what extent the South African medical aid industry implements all these principles and to what extent it has explored alternative risk management strategies.

## 2.1 DEFINITION OF RISK

Vaughan (1989:17) considers risk to be:

*“ a condition in which there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for”*

This would seem to include risk as: variance, disaster, lack of information and loss probability and also involves the concepts of uncertainty and the possibility of the occurrence of an untoward event, which is an inherent part of risk when discussing risk management.

### 2.1.1 PROBABILITY

In order to proceed further, it is necessary to review the notion of probability. The concept of probability is used in understanding the law of large numbers. The concept is that in the long run, probability will determine the likelihood that a particular event will occur. It must be realised that this may not necessarily be true for a single event but if these events are repeated a sufficient number of times, there is a likelihood that it will reach the number expected (Troyer et al 1986:165). The formula for determining the probability of a particular event is equal to the results of the event under study divided by the total number of different results that have an equal chance of occurring. For example, if the event under study is the number of uncomplicated deliveries in the obstetrical unit of a particular hospital during one year, and there were



500 deliveries in the hospital during the period, of which 20 were considered complicated, then the probability of having a complicated delivery in that particular hospital would be 4 percent i.e. (20/500).

Quantitative techniques can be extremely useful in risk management because probability theory serves as the basis for insurers' pricing decisions. It is only logical that risk managers would use the same techniques in evaluating insurance as a risk management alternative.

One of the more useful applications of probability theory in risk management is its use in simulation models (Vaughan 1997:7). Such models use mathematical equations to represent the various scenarios within the risk environment and indicate the likely outcomes of the various choices. Simulation models vary from simple to very complex. The models permit risk managers to test various scenarios and determine the most likely outcomes for various decisions.

There are two general categories of computer models: deterministic models and probabilistic models.

- *Deterministic models* are characterised by consistent results. They do not explicitly recognise random variation in the environment being modelled. If a deterministic model is run many times with exactly the same values for all of the input factors, it will produce exactly the same output each time.

- *Probabilistic models*, also called stochastic models, explicitly recognise randomness or uncertainty. The range of chance variation may be quite large in some models.

### 2.1.2 VARIATION

Variation is the estimated probability distribution. A person contemplating hip replacement surgery might be said to have a theoretical 5 percent chance of contracting an infection. The danger of using such statistical probability is that it does not consider the unique facts and circumstances under which those particular infections arose but rather only provide a statistical ballpark guide to predicting outcomes. The variations might be very different. The concept of variation thus becomes an important consideration in understanding the concept of risk.

### 2.1.3 UNCERTAINTY

Another concept associated with risk is uncertainty. A person who cannot predict an outcome is uncertain or is consciously aware of the risk of an unpredictable outcome. Uncertainty is a subjective concept, so it can be measured directly (Williams, Smith and Young 1995:10). The degree of uncertainty depends on that person's estimation of the risk involved with the activity and confidence in those beliefs or estimations. The reduction of uncertainty has economic value, and information can reduce uncertainty. Risk and uncertainty have an important impact on an organisation in that they exact a cost mainly referred to as the cost of

risk i.e. cost of loss, or cost of uncertainty itself e.g. cost of insurance (Williams et al 1995:15).

#### *2.1.4 DEGREE OF RISK*

The most commonly accepted meaning of "degree of risk" is related to the likelihood of occurrence (Vaughan 1997:10). We intuitively consider those risks with a high probability of loss to be "riskier" than those with a lower probability. When risk is defined as the possibility of an adverse deviation from a desired outcome that is expected or hoped for, the degree of risk is measured by the probability of the adverse deviation.

When dealing with a large number of exposure units, estimates can be made about the likelihood that a given number of losses will occur, and predictions can be made on the basis of these estimates. Here the expectation is that the predicted number of losses will occur. In the case of aggregate exposures, the degree of risk is not the probability of a single occurrence or loss; it is the probability of some outcome different from that predicted or expected. For an insurance company, then, the risk is that its prediction will not be accurate. The actual experience will undoubtedly deviate from the expectation, and insofar as this deviation is unfavourable, the insurance company faces risk. Therefore the insurance company makes predictions not only on the outcome but also estimates the range of error (Vaughan 1997:11).

At times we make use of terms "more risk" and "less risk" to indicate a measure of the possible size of the loss, even though the probability of loss is the same. It seems, therefore, that a measure of risk should

recognise the magnitude of the potential loss. Therefore the expected value of a loss is the probability of that loss multiplied by the amount of the potential loss.

Richards and Rathbun (1983:25) identify a set of up to five risk classes, based on the economic consequences of the occurrence of specific individual risks:

1. *Preventative risks*: risks whose cost of occurrence is higher than their cost of management and whose occurrence may invoke additional legal sanctions. This class would include injuries caused by gross negligence.
2. *Normally prevented risks*: risks whose cost of occurrence is greater than the cost of their management but whose occurrence will be considered only as negligent. This class includes most negligent injuries and most types of product liability actions.
3. *Management risks*: risks whose cost of occurrence is only slightly greater than their cost of management. The plaintiff usually has the burden of showing that the defendant owed the plaintiff a special duty to recover for one of these risks.
4. *Unprevented risks*: risks whose cost of occurrence is less than their cost of management. The classic example of this class is the cost of railroad crossing barriers compared to the cost of people being hit by trains.

5. *Unpreventable risks*: risks whose occurrence is manageable.

The assignment of risk to one of these classes is a major problem in quality control, because the class of risk determines how much effort must be expended to prevent the risk. The misclassification of a preventative or normally prevented risk as a managed or unpreventable risk can result in large financial losses. For example, a hospital that does not update obsolete equipment, such as inaccurate oxygen monitors in the premature nursery, would be liable for any inquiries attributable to the obsolete equipment. The classifications of risk must be reviewed periodically to determine if the cost of the risk-taking behaviour has changed, thereby altering the classification.

Managers should be able to distinguish between the concepts of risk, probability, and uncertainty as well as understand factors that affect risk attitudes so that they can evaluate risks in accordance with the various researchers' classification schemes.

## 2.2 CLASSIFICATION OF RISK

Businesses may fail or suffer as a result of a variety of causes. The differences in these causes and their effects constitute the basis of different classifications of risk. The sources of risk may be classified as dynamic or static, pure or speculative, and fundamental and particular (Vaughan 1997:13).

### 2.2.1 DYNAMIC OR STATIC RISK

Dynamic risks are those resulting from changes in the economy, arising from two sets of factors (Willett 1951:14). The first sets are factors in the external environment: the economy, the industry, competitors and consumers. Changes in these factors are uncontrollable, but all have the potential to produce financial loss to the firm. The other factor that can produce the losses that constitute the basis of speculative risk are management decisions within the firm.

Dynamic risks normally benefit society in the longer term, since they are the result of adjustments to misallocation of resources.

Static risks involve those losses that would result even if no changes in the economy occurred. Static losses tend to occur with degree of regularity over time and, as a result, are generally predictable. Because they are predictable, static risks are more suited to treatment by insurance than are dynamic risks.

### 2.2.2 *PURE VERSUS SPECULATIVE RISK*

Perhaps the most used classification is one developed by A. Mowbary, R.H. Blanchard, and C.A Williams, Jr. (1969:6). Their system divides economic risks into *pure* and *speculative*. Essentially, *pure risks* are those in which the only chance is that of loss. When a former patient sues a hospital, the nature of the risk giving rise to the suit is pure in form because the hospital stands to suffer a loss if the plaintiff is successful. In contrast *speculative* risk presents chances of gain as well as loss. A hospital that attempts to develop a new health care service may show a financial gain from utilization of that service or it may suffer a loss if the service is not used. The risk is deliberately created in the hope of gain.

### 2.2.3 *FUNDAMENTAL AND PARTICULAR RISKS*

*Fundamental risks* involve losses that are impersonal in origin and consequence. They are group risks, caused for the most part by economic, social and political phenomena, although they may also result from physical occurrences. They affect large segments, or even, all the population.

*Particular risks* involve losses that arise out of individual events and are felt by individuals rather than by the entire group. They may be static or dynamic. The individual would deal with these risks through insurance, loss prevention or some other technique.

## 2.3 **GENERAL PRINCIPLES OF RISK MANAGEMENT**

*" Risk management is a scientific approach to dealing with pure risks by anticipating possible accidental losses and designing and implementing procedures that minimise the occurrence of loss or the financial impact of the losses that do occur." (Vaughan 1997:30)*

A fundamental part of the risk management function is designing and implementing procedures that minimise the occurrence of loss or the financial impact of the losses that do occur.

Risk management may be considered a process involving a number of steps aimed at identifying, evaluating and handling risks. Claes & Meerman (1991); Dickson (1991); Grose (1989); Head & Horn (1991), among others, have all considered the constituent tasks of risk management and these will be discussed below.

### *2.3.1 DETERMINING OBJECTIVES*

The first step in the risk management process is to decide precisely what the organisation would like its risk management programme to do. There are a variety of possible objectives for the risk management function. They include maintaining the organisation's survival, minimising the costs associated with pure risk, and protecting employees from accidents that might cause serious injury. The first objective of risk



management, however, is to guarantee the continuing existence of the organization as an operating entity in the economy (Vaughan 1997:35).

Risk management programme objectives can be categorised as pre-loss and post-loss. Pre-loss objectives concern how much effort the medical aid will expend on the risk management programme to reduce or prevent losses. Post-loss objectives deal with how the institutions can recover from a loss, given the fact that the primary aim is survival of the medical aid. If the loss would produce certain effects that could injure the corporation's reputation, the pre-loss objective may be changed to put more emphasis on loss reduction and loss prevention efforts.

The requirements for survival according to Monagle (1985:12) include:

- (1) The ability to meet legal obligations;
- (2) A sufficient pool of usable assets and organisational talent to regain post-loss stature, and
- (3) Public acceptance of the institution after the loss.

Efforts beyond essential legal obligations are often required to convince key supporters that underlying conditions remain favourable despite the immediate misfortune.

Mere survival is not enough, however. Efficiency and growth are critical objectives as well. Growth generally requires:

- (1) The prevention of interruption in earnings;

- (2) Preservation of earnings growth, and
- (3) Sufficient liquidity to remain acquisitive and expansive.

Finally, risk aversion is very real. Freedom from anxiety about possible losses is a valid risk management goal.

Although the actual practice of risk management would be likely to vary among organisations, certain elements would be common to all risk management programmes. Together these elements comprise the risk management function. They are:

1. Risk Identification
2. Risk Evaluation
3. Risk Treatment, i.e. risk control and risk financing.

### *2.3.2 RISK IDENTIFICATION<sup>2</sup>*

This task is an integral part of a risk management programme. It is only by identifying risks that action can be taken to control them. Risk identification is a continual process as new risks are arising constantly. The process of identifying risks depends on a wide-reaching communication network generating a constant flow of information. Systems should be established, aimed at determining the nature of the risks being faced by the organization so that action can be taken to provide for their occurrence and lessen their impact on the organization.

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<sup>2</sup> Tools used in risk identification in the South African medical aid environment are explored in question 2.1 of the interview framework in the Appendix to Chapter 7.

Until recently the primary methodology of risk identification was the observation of losses that had already occurred (Vaughan 1997:108). As a rule, risk identification did not occur until a loss had taken place. Once a loss occurred, people sought measures that would prevent the recurrence of loss from the same source.

### *2.3.2.1 Tools in risk identification*

The more important tools used in risk identification include internal records of the organisation, insurance policy checks, risk analysis questionnaires, flow process charts, analysis of financial statements, inspections of the firm's operations and management interviews. These, combined with a vivid imagination and a thorough understanding of the organisation's operations can help to guarantee that important exposures are not overlooked (Vaughan 1997:36).

Monagle (1985:15) identifies four common methods by which a medical organisation systematically and continuously identifies property, liability, and personnel exposures as soon as or before they emerge:

1. *Risk Analysis Questionnaires*: A key tool in risk identification sometimes also called a fact finder. These questionnaires are designed to lead the risk manager to the discovery of risks through a series of detailed and penetrating questions, and in some instances, this instrument is designed to include both insurable and uninsurable risks. The risk analysis questionnaire is designed to serve as a

repository for the information that is gained from documents, interviews, and inspections. The information in the completed questionnaire is gained from an analysis of documents, inspections, records, and interviews. Its purpose is to lead the person attempting to identify exposures through the identification process in a logical and consistent fashion.

2. *Exposure Checklist*: There are a number of pre-printed surveys available to determine loss potentials within the organisation. They are useful in jogging the memory before and after inspections, but generally should not be used during an inspection.
3. *Expert Systems*: In a sense, an expert system used in risk identification incorporates the features of risk analysis questionnaires, exposure checklists, and insurance policy checklists in a single tool.

### ***2.3.2.2 Risk Identification Techniques***

The risk identification tools described earlier provide a framework within which one can interpret information derived from four risk identification techniques: orientation, analysis of documents, management interviews and inspections (Vaughan 1997:113)<sup>3</sup>.

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<sup>3</sup> We expand on the first two points, the last two points are self explanatory

1. *Orientation:* The first step in risk identification is to gain as thorough a knowledge as possible of the organisation and its operations. If the organisation is a public corporation, the best place to start is with the latest annual report.
  
2. *Analysis of Documents:* The history of the organisation and its current operations are recorded in a variety of records. These records represent a basic source of information required for risk analysis and exposure identification. As a starting point in the risk identification process, the auditor should obtain certain internal and external documents that summarize the activities and history of the organisation. These documents include the following: Copy of the annual report; latest balance sheet; latest income statement; flowchart of operations etc.
  - *Financial statement analysis:* Since all business transactions eventually involve either money or property, the risk manager can identify all existing property, liability, and personnel exposure by analysing the balance sheet, operating statement, and supporting records. Examinations of budget and forecasts will identify future risks.
  
  - *Flow chart method:* Flow charts show all operations of the medical aid to delivery of the final products or service. A checklist of potential losses is supplied to each operational stage in the flow.

Claims history also plays an important role in risk identification. Once managers know the services it is vital to be fully aware of past claims information and each health provider's claims experience. Managers must also be aware of the national claims experience as a basis of comparison. It is however important for the risk manager to understand that claims statistics do vary from province to province.

The preferred approach to risk identification consists of a combination approach, in which all risk identification tools are brought to bear on the problem. In a sense, each tool can solve a piece of the puzzle, and combined they can be of considerable assistance to the risk manager. But no individual approach or combination of these tools can replace the diligence and imagination of the risk manager in discovering the firm's risks.

The risk identification tools and methods discussed are not sufficient to identify new risks as they emerge (Vaughan 1997:122). To identify new risks, the risk manager needs a far-reaching information system. Because risks may arise from many sources, the risk manager needs information systems designed to provide a continual flow of information about changes in operations, acquisition of new assets, new construction, and changing relationships with outside entities. Records and statistics are essential tools of the risk management profession, and without adequate records, it is difficult to analyse the risks facing the organisation and to determine the advisability of retaining certain risks. In addition, records relating to property valuations, past losses and other critical pieces of

information should be readily available to the persons responsible for administering the programme.

Much of the information required for this risk management information system already exists within most organisations in an unstructured form. The information becomes more useful when it is combined into a useful database that facilitates analysis.

### *2.3.3 RISK EVALUATION<sup>4</sup>*

Once the risks have been identified, the risk manager must evaluate them. This involves measuring the potential size of the loss and the probability that the loss is likely to occur and then providing some ranking in order of priorities. Whether a particular exposure is ultimately classed as critical, important, or unimportant depends on the potential severity of the loss. In addition the magnitude of the potential loss must also be measured to determine the amount of insurance that should be purchased when the decision is made to transfer risks.

The analysis process can be approached from many different angles. A typical example might be a statistical or mathematical process in which the manager attempts to identify the exposures and analyse them in an effort to manage particular risks, i.e. the concept of probability<sup>5</sup>.

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<sup>4</sup> The risk analysis undertaken by medical aids in South Africa is studied under question 2.2 of the interview framework in the Appendix to Chapter 7.

<sup>5</sup> Probabilities are explored further in paragraph 2.1.1.

The recorded occurrences should be looked at in several ways (Troyer et al 1986:165):

- The probable frequency of the occurrence of the loss;
- the probable severity of the loss;
- the possible severity of the loss;
- the effect the potential loss would have on the organisation financially.

The first step is to look at the maximum probable and possible losses. The maximum probable loss means the worst loss that would be anticipated under average conditions. The maximum possible loss assumes the worst possible conditions and looks at the worst loss that can arise. Typically one would look at the maximum possible loss in dealing with a single structure, or a limited number of "properties" in a risk portfolio. Since the facility might not have an experience base large enough to spread the loss and therefore would lack the spread among a large number of events to determine the maximum probable loss (Vaughan 1997:17). This, however, would not be the case with a medical funder. The insurer/underwriter would rather attempt to determine the magnitude of the most likely loss. Given the underwriters' spread of risk and the numerous "properties" in his/her portfolio, this is a reasonable strategy.

Once the probable and possible outcomes have been determined, the next step is to determine the effects of those potential losses on an



organisation, both from a clinical and financial standpoint. In today's environment, what effect will it have on:

- (1) the assets of the organisation;
- (2) on its future creditworthiness;
- (3) the goodwill of the medical aid in the community, once the medical aid learns of the losses.

In order to analyse the risks in a holistic manner a risk management committee should be created which is multidisciplinary<sup>6</sup> i.e. composed of physicians, nurses, a pharmacist, and the risk manager. This committee once organised can do several things.

- It can look at individual cases and serious incidents - for example, a potential or actual claim. There can be a multidisciplinary review process for the risk manager to review the medical records and help obtain advice as to what indeed has happened. Was the care ideal?
- It can analyse occurrence data to find systems and patterns so that procedures can be evaluated, medical disposables or drugs used, staffing patterns altered, educational programmes undertaken, or whatever may be necessary to correct problems with the care that may be identified.

It can be a good source for pooling information from different departments or people involved in a problem, such as the nursing

members or the physicians. The goal of this committee would be to reduce the exposure and the frequency of claims while increasing the quality of care.

#### 2.3.4 *RISK TREATMENT*<sup>7</sup>

As stated in the definition of risk management, a fundamental part of the risk management function is designing and implementing procedures that minimise the occurrence of loss or the financial impact of the losses that do occur. This indicates the two broad techniques used in risk management for dealing with risks: risk control techniques and risk financing techniques.

The risk manager should apply at least one risk control and one risk financing tool to each significant exposure: good risk management requires a combination of several techniques, each used in proper balance with others. If only risk control techniques are used, there remains some possibility of serious loss that could require risk financing to restore. If, on the other hand, only risk financing techniques were used - with no efforts to control losses - the costs of financing would be unnecessarily high.

Historically, risk management focused on preserving the financial resources of the institution. Today, however, particularly in a high

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<sup>6</sup> Risk committees are covered in question 1.2 of the interview framework.

<sup>7</sup> The issue of risk treatment, both with respect to risk control and risk finance in the South African medical aid industry is explored in the Appendix Chapter 7, question 2.4 of the interview framework.

technology industry such as health care, human resources are a valuable asset (Troyer & Salman 1986:151). The medical aids' relationship with its health care providers and customer groups, and ability to develop and maintain a good rapport with it, constitutes an important resource. If the medical aid is unable to maintain that rapport, the employer groups will be in a position to either threaten to or actually take their business to another medical aid. Therefore medical aids must protect that resource. This constitutes a risk that a medical aid would need to control through improved efficiency of service.

#### ***2.3.4.1 Risk Control Techniques***

Once the risks have been identified and evaluated decisions are made as to how these risks are to be controlled.

Broadly defined, risk control techniques are designed to minimize, at the least possible cost, those risks to which the organization is exposed. Risk control methods include risk avoidance and the various approaches to reducing the risk through loss prevention and control efforts.

The two major techniques of risk control are risk avoidance and risk reduction:

- *Risk avoidance*: Technically, avoidance takes place when decisions are made that prevent a risk from even coming into existence. This would include abandoning or not engaging in an asset or activity rather than accepting the associated pure risk.

An example would arise as a result of the high incidence of medical malpractice claims in some fields that has resulted in a shortage of practitioners in these areas. The line between risk avoidance, risk reduction or risk transfer is sometimes a hazy one. Once the risk exists, it is more appropriate to classify the measures used to eliminate it or minimise it as loss prevention rather than avoidance. The distinction, however, is merely semantic. In either case, the efforts to minimize risk constituted risk control efforts.

If avoidance is used extensively the firm may not be able to achieve its primary objectives. For this reason avoidance is the last resort in dealing with risk. It is used when there is no other alternative (Vaughan 1997:180).

- *Risk reduction:* This term is used to define a broader set of efforts aimed at minimizing risk. Risk reduction consists of all techniques designed to reduce the frequency of loss, or the potential severity of those losses that do occur. It is common to distinguish between loss prevention- those efforts aimed at preventing losses from occurring - and loss control- those efforts aimed at minimizing the severity of loss if it should occur. One can reduce or eliminate the chance of loss by, for example, good housekeeping, quality control, and safety programmes, in the case of medical aids strong case management to ensure the validity of claims.

#### 2.3.4.1.1 *Specialized loss control techniques*

It is possible to describe broad control techniques into which the virtually endless array of specific approaches can be classed. Vaughan (1997:190) outlines several specialized loss control techniques.

- *Separation of exposure units*: Dispersed assets and activities to reduce the risk of loss in a single event.
- *Combination of exposure units*: Combining widespread exposures to make losses more predictable by use of the law of large numbers.
- *Salvage*: When efforts aimed at preventing the occurrence of a loss fail and the loss occurs, the amount of the loss can be reduced by immediate action to protect the remaining value that has not been damaged.
- *Rehabilitation*: The salvage function applied to human beings.
- *Non-insurance transfer*: Some risk transfers - most notably insurance-are a form of risk financing. Other types of transfers are more appropriately classified as risk control measures (Vaughan 1997). These risk-control transfers include a variety of business activities, such as leasing, subcontracting and contractual arrangements that alter the incidence of loss. Another type of risk transfer that falls within the ambit of risk control consists of contractual transfers of risk that are auxiliary to another contract or agreement. Such agreements are referred to as *holdharmless*

*agreements* and *indemnity agreements*. An example of such an agreement would be concluding a contractual arrangement in which medical insurers transfer an element of risk into the hands of the provider. One method of achieving this would be by introducing a fixed fee instead of a fee-for-service system.

The classification of these types of transfers as risk control measures can be debated. Generally, risk control reduces risk. When a risk is transferred to another party, it has not been eliminated, but merely shifted to another party. From this perspective, contractual transfers of risk do not reduce risk, at least not in the aggregate. From the perspective of the transferor, however, the risk is reduced, so we will consider these as risk control measures.

#### ***2.3.4.2 Risk Financing Techniques***

Risk control techniques will not eliminate all risks facing the organisation. Although risk may be reduced, some risks will remain. These remaining risks are addressed by the second broad approach to risk management, risk financing. The techniques of risk financing, retention and transfer are mutually exclusive and collectively exhaustive.

Financing risk is a means of providing funds to meet the costs incurred following the operation of a risk. The classification of risk financing techniques is based on the source of funds (i.e. whether it is inside or outside the organisation). Risks that are not transferred are retained. There are essentially two types of financing techniques: Insurance and Retention.

#### *2.3.4.2.1 Insurance*

Risk transfer, involves the use of external funds. It can be categorized as (1) non-insurance transfer, or making someone else responsible for the loss obligation, or (2) insurance transfer, or selling the risk to a professional risk bearer for a premium.

Insurance is a contractual relationship by which risk is transferred to another party. Insurance in its simplest aspect has two fundamental characteristics:

- Transferring or shifting risk from one individual to a group.
- Sharing losses, on some equitable basis, by all members of the group.

In addition to eliminating risk at the level of the individual through transfer, the insurance mechanism reduces risk (and the uncertainty related to risk) for society as a whole. The risk the insurance company faces is merely a summation of the risk transferred to it by individuals. The insurance company is able to do something that the individual cannot, and that is to predict within narrow limits, the amount of losses that will actually occur. The accuracy of the insurer's predictions is based on the law of large numbers. By combining a sufficiently large number of homogenous exposure units, the insurer is able to make predictions for the group as a whole. This is accomplished through the theory of probability.

If the medical insurance company's actuaries or statisticians could predict future losses with absolute precision, the insurer would have no possibility of loss. It would collect each individual's share of the total losses and expenses of operation and use these funds to pay the losses and expenses as they occurred. Premium income would always be sufficient. To the extent that the accuracy in prediction is attained, and risk is reduced.

Although probability plays an important role on the operation of the insurance mechanism, insurance does not always depend on probabilities and predictions. Insurance arrangements can exist in which the participants agree to share losses and to determine each party's share of the costs on a post-loss basis. It is only when insurance is to be operated on an advance premium basis, with the participants paying for their share of losses in advance, that probability theory and predictions are important.

### *Reinsurance*

Reinsurance is a device whereby an insurance company may avoid catastrophe hazard in the operation of the insurance mechanism. As the term indicates, reinsurance is insurance for the insurer. It is based on the same principles of sharing and transfer as insurance itself. There are two types of reinsurance treaties: Facultative and automatic (Vaughan 1997). Under facultative treaty, each risk is submitted by the direct writer to the reinsurer for acceptance or rejection. Although the terms under which reinsurance will take place are spelled out, the direct writer is not



obliged to submit a risk to the reinsurer and the reinsurer may accept or reject risks that are submitted. Until risk has been submitted and accepted or rejected the writer carries the entire risk. Under the terms of an automatic treaty, the reinsurer agrees in advance to accept a portion of the gross line of the direct writing company or a portion of certain risks that meet the reinsurance underwriting rules of the reinsurer.

#### **2.3.4.2.2 Risk retention**

Risk retention, the most common method of handling risk, may be passive or active (unplanned or planned). Retention is passive when the existence of the exposure is unknown and, thus, there is no attempt to address it. Retention is active when the exposure is considered and consciously retained. Organizations may consider active risk retention when (1) it is impossible to transfer or prevent the loss, risk avoidance is desirable; (2) the maximum possible loss is so small that the organisation can safely absorb it; (3) the chance of loss is so low that it can be ignored or so high that transfer would be too costly; or (4) when losses are highly predictable.

The organisation that is retaining risk may:

- (1) Treat losses as current expenses on a pay-as-you-go basis;
- (2) Create reserves for loss liabilities, either funded or unfunded. In a funded retention programme, the firm earmarks assets and holds

them in some liquid or semi-liquid form against the possible losses that are retained;

- (3) Establish a captive insurance company affiliate to underwrite the firm's risk;
- (4) Borrow the funds at the time of a loss.

## **2.4 PROGRAMME ADMINISTRATION**

The programme, once implemented, must be evaluated and monitored. This is to ensure that the objectives of the programme have been attained. If this is not the case the person responsible for risk management will need to take action to rectify the situation.

## **2.5 CONCLUSION**

The loss exposure that confronts medical aids includes property loss and net income losses as a result of a decrease in revenues or an increase in expenses. Medical aids, like other organisations, have limited resources available for any programme, risk management being no exception. Therefore, by measuring and analyzing the identified risks, managers are in a better position to allocate resources to areas that will produce the best return for the time, efforts and funds invested.

Whatever the organisational goals are - efficiency, growth, improvement of reputation in the community, reduction of anxiety over potential loss

exposure - they should guide the specific objectives of the risk management programme. Thus, the determination of these objectives and organizational values lies at the heart of the risk management programme.

After setting objectives a company would go about identifying risk. Until recently the primary methodology of risk identification was the observation of losses that had already occurred. To identify new risks, the risk manager needs reaching information systems designed to provide a continual flow of information. Records and statistics are essential tools of risk management, especially when combined into useful databases that facilitate analysis.

Once risks have been identified, the risk manager must evaluate them in terms of potential size and probability of loss, which will empower the manager with the knowledge on how to treat the relevant risks.

Formulation is the initial part of managing strategically but once strategy has been developed, implementation is vital. The following chapter refers more specifically to the medical aid industry and to the implementation of risk management in health care organisations.

## CHAPTER 3: MEDICAL INSURANCE IN SOUTH AFRICA

### 3.1 INTRODUCTION

Medical schemes are non-profit organizations and their main objective is to assist members with their medical expenses (Dorrington 1985:107). They work on basic principles of insurance. Adam Smith offered a definition more than 200 years ago:

*“ The trade of insurance gives great security to the fortunes of private people, and by dividing among a great many that loss which may ruin an individual, makes it fall light and easy upon the whole society. ” (Smith 1937: 715)*

Although the economic nature of today is very different from that of Smith's, little change is needed in his definition to make it fit the current situation. Insurance may function in various circumstances, it remains a mechanism permitting the shifting of a potentially unbearable loss cost from the individual to a pool composed of many individuals, when averaging the total cost of loss paid by the pool across all its members.

Worldwide, health care systems have been facing financial difficulties and South Africa has been no exception. In the private health care sector costs have risen 33 percent faster than employee remuneration and, partly as a result of this, medical scheme membership has been declining since 1990 (De Clerk 1993:1).

Medical aids have priced themselves into the public eye. There is substantial evidence to indicate that when a large proportion of medical costs are offset by insurance, doctors will recommend more services, the consumers in return will demand more and better services. Thus as insurance increases a higher quality of care is demanded. Hospitals, as they work to fill the demand for increased services, raise prices in order to raise revenue, which can be used to provide more expensive form of care demanded. Since most consumers in the private sector do not pay out of pocket for hospital care because they are heavily insured, they are shielded from the resulting increase in prices and do not respond in the normal way by curtailing demand. On the contrary as consumers observe the higher prices, or cost, of medical care, their desire for insurance increases and likewise their demand for medical care increases, so the inflationary cycle continues.

This is just one of the problems facing the medical aid industry and contributing towards its demise. The purpose of this chapter is to draw on the background and structure of the medical aid industry in South Africa in order to gain a clearer understanding of the causes of some of the inefficiencies in the system.

### **3.1 THE SOUTH AFRICAN HEALTH CARE ENVIRONMENT**

South Africa has a population of over 40 million, 73 percent of who are women and children. The World Bank (Private Health Care 1998: 25) classifies South Africa as a middle-income country. South Africans spend 8,5 percent of Gross Domestic Product (GDP) on health care, of which as much as 60 percent is spent in the private sector, which in turn only services 23 percent of the population (Government Gazette 1997:12).

Our health-care expenditure may even be more than 8,5 percent of GDP because public sector expenditure excludes indirect costs, such as maintenance of buildings and equipment. Nor does the figure reflect expenditure on health care at local authority level, e.g. immunization clinics, expenditure on hygiene and environmental health, and more.

Compared with other countries this is very high, as can be seen from the figures in table 3.1. on page 60.

**Table 3.1: Health statistics for reporting OECD countries 1993**

| Country           | Acute beds per<br>1000 population | Total health spend<br>percent of GDP (1994) |
|-------------------|-----------------------------------|---------------------------------------------|
| Australia         | 4.3                               | 8.5                                         |
| Austria           | 5.4                               | 9.7                                         |
| Belgium           | 4.8                               | 8.2                                         |
| Denmark           | 4.1                               | 6.6                                         |
| Finland           | 4.6                               | 8.3                                         |
| France            | 5.0                               | 9.7                                         |
| Germany           | 7.2                               | 9.5                                         |
| Greece            | 3.9                               | 5.2                                         |
| Ireland           | 3.2                               | 7.9                                         |
| Netherlands       | 4.1                               | 8.8                                         |
| New Zealand       | Na                                | 7.5                                         |
| South Africa      | 4.0                               | 8.5                                         |
| Turkey            | 1.9                               | 4.2                                         |
| United<br>Kingdom | 2.1                               | 6.9                                         |
| United States     | 3.5                               | 14.3                                        |

Source: The seventh annual publication of the Hospital Association of South Africa

South Africa exhibits major disparities and inequalities in health care distribution. This is the result of former apartheid policies, which ensured racial, gender and provincial disparities. The majority of South Africa has inadequate access to basic services including health, clean water and basic sanitation. Statistics for 1994 suggest that between 35 and 55 percent of the population live in poverty. 53% percent of the population live in rural areas the vast majority of whom are poor (Government Gazette, April 1997:11).

The 1997/1998 Health Budget allocation was R20,2 billion, this was up 9,5 percent to the 1996/1997 budget. This figure equates to the health expenditure in the private sector: The difference lies in the volume of people being serviced by the private versus the public sector, with the private sector servicing 23 percent of the population.

Although the increase in the budget in the last financial year once again comes in below medical inflation, there has undoubtedly been an increase in the fraction of the budget allocated to health in the past few years. Health consumes 10,7 percent of the 1997/98 budget, compared to 10,3 percent in 1996/97 and 10,2 percent in 1995/96, a 41 percent increase in monetary terms from 1995. This allocation is comparable to high-income countries that average about 12,5 percent compared to middle - income countries at 5,1 percent and low income countries at 3,4 percent (Government Gazette, April 1997:11).

In spite of South Africa's high expenditure on health care, it ranks as the unhealthiest country in the world as reflected in table 3.2 on the following page.

**Table 3.2: The world's healthiest and unhealthiest countries**

| Country | Rank | Country | Rank |
|---------|------|---------|------|
| Israel  | 1    | UK      | 14   |
| Sweden  | 2    | USA     | 15   |
| Canada  | 3    | Poland  | 16   |



|             |    |              |    |
|-------------|----|--------------|----|
| Australia   | 4  | Mexico       | 17 |
| Switzerland | 5  | Taiwan       | 18 |
| Japan       | 6  | China        | 19 |
| Netherlands | 7  | Hungary      | 20 |
| Singapore   | 8  | Malaysia     | 21 |
| Italy       | 9  | Argentina    | 22 |
| France      | 10 | Turkey       | 23 |
| South Korea | 11 | Russia       | 24 |
| Spain       | 12 | Brazil       | 25 |
| Germany     | 13 | India        | 26 |
|             |    | South Africa | 27 |

Source: The seventh annual publication of the Hospital Association of South Africa

Though health expenditure compares fairly well to developed countries the resulting health care level is no better than middle income countries which spend far less.

It is estimated that the infant mortality rate, being the mortality rate for infants under the age of five, happens to be greater than 49 for every 1000 and is much higher than expected of a country with South Africa's level of income (Government Gazette, April 1997:11). This figure compares with middle-income countries at 38 for every 1000(Government Gazette, April 1997:11).

### *3.1.1 PROBLEMS IN HEALTH CARE DELIVERY*

The health system in South Africa is a combination of a voluntary private sector and a national public health service that is tax funded.

In the region of 7,7 percent of the population (of approximately 31 million) are provided for by the public sector and 23 percent (9 million) by the private sector (Government Gazette 1997:12).

The major problems facing this system may be summarized as follows:

- There is a gap in the provision of primary health care services and related infrastructure;
- There is inadequate physical distribution of resources on a geographic basis;
- There are major inconsistencies in the determination of the distribution of the state budget for the public health system generally. These inconsistencies exist at both the macro and micro levels. Both systems of accounting and basic information to determine new resource priorities are inadequate;
- Both the private and public sectors are administered rather than managed with poor utilization of information;
- The private sector cost increases are resulting in a fragmentation of the risk pool with more and more people choosing not to take indemnity coverage, risk rating of high medical risks, product proliferation with respect to medical cover, free-riding on the state services, and benefit stripping to cut costs. The result is that many

people who could afford to pay for their own health care now rely on the state services where there is an under-recovery of costs;

- The continuation of fee-for-service remuneration on a large scale has resulted in the uncontrolled increases in expenditure on private medical services.

### *3.1.2 PRIVATE HEALTH CARE SECTOR*

Healthcare is one of South Africa's fastest growing industries, with employers spending 10-15 percent of total payroll on this sector. Twenty years ago, the average expenditure was closer to 1 percent of payroll, says Conradie of Hollandia Reinsurance Group (Sunday Times Business Times 1998:1). Given that salary increases of 8-11 percent per annum has not kept up with the larger 25 percent medical inflation, the cost of medical aid cover is becoming prohibitively expensive. Young, low risk members are opting out of the medical aid schemes, and the risk profile of the medical aids is deteriorating further. Already the number of registered medical schemes has dropped from 220 to 174 over the past four years (Registrar of Medical Schemes 1996:1).

The size of the South African private health care sector has increased markedly during the 1980's. Much of the growth in this sector has been a consequence of certain unique structural changes, such as the migration of patients and high skilled staff from the public sector to the private sector, as well as market failure in the production and consumption of health care (Magennis 1991:1). By

the end of 1991, medical schemes financed medical care for an estimated 18,7 percent of the South African population (McIntyre 1993:2). The number of doctors in the private sector had increased by 112 percent between 1979 and 1990 as opposed to 31,5 percent in the public sector (Masobe 1992:2). The private sector accounts for an estimated 50 percent of the total South African health care expenditure. More than 59 percent of registered medical practitioners, 84 percent of pharmacies and 93 percent of dentists are active in the private sector (Masobe 1992:2).

Although health care costs have been escalating in both the public and the private sectors it has been more pronounced in the private sector. Between 1975 and 1990, medical aid contributions increased at an average of 24,5 percent per annum while the consumer price index increased at 13,7 percent (Registrar of Medical Schemes 1994) (Appendix 1). Furthermore, benefit payouts have increased more rapidly than subscriptions since the late 1980's, leaving medical aid schemes with declining reserves and increasingly financially insecure despite raising contribution scales (McIntyre 1993:1).

In 1994 industry figures indicate that the growth in cost per member were largest for private hospitals where costs increased over 30 percent and indications are that 1995 evidenced a similar escalation in costs (King, Nel, Eden and Young 1995:3). In the same breath, however, it is common belief, and this research study will confirm, that the majority of South African medical fund administrators have

never seriously employed case management tactics in evaluating the medical bill. Nor have they applied utilization management tools in order to determine where the source of the problem of rising costs lie.

In the face of these adversities, there has been increasing support for the restructuring of private sector medical finance mechanisms to help contain risks and its concomitant costs. Since the early 1980's there has been a large scale move, most notably in the United States, to introduce managed healthcare, a means of controlling private sector health care expenditure. Encouraged by indications that managed healthcare has had some success in controlling costs, there has been significant private and government support for the introduction of managed healthcare in South Africa.

Amendments to the Medical Schemes Act in 1989 and 1993 have removed many legal obstacles to the development of managed healthcare in the private sector. In particular they have removed the guarantee of payments to providers for services rendered, allowing schemes to refuse to pay for treatment that they considered unnecessary. In addition, the amended Act gives freedom to medical schemes and insurers to create "limited" medical cover packages, replacing legislation which specified which benefits must be included. In short, the new law will bring managed healthcare to the fore. At the same time the South African Medical and Dental Council has removed previous prohibitions on collaboration between

providers (hospitals, doctors etc.) and insurers, thereby allowing them to start managed healthcare schemes.

### **3.1.2.1 Summary**

As a consequence of the problems outlined above, the medical aid system, which constitutes the largest portion of the private health sector, is in danger of collapsing. The urgency to resolve the crisis is compounded by the fact that the private health care sector is likely to expand considerably in the near future. The current medical aid market only covers 12 percent of the black population and with the government promulgating legislation requiring that all formally employed individuals in South Africa be under some form of medical cover, the medical aid industry could see an increase in demand. There are currently 6,5 million people on some form of medical cover. This compares with a potential further 7,5 million formally employed individuals who currently have no cover (Da Costa 1996:7). This indicates a large untapped market for the medical aid industry.

## **3.2 THE MEDICAL AID INDUSTRY, BACKGROUND, PROGRESSION AND PROBLEMS**

### **3.2.1 THE MEDICAL AID INDUSTRY**

The first medical scheme was started in 1889 by the diamond conglomerate De Beers, for its employees. Since then there has been a

proliferation of medical schemes in South Africa and in 1967 the Medical Schemes Act was introduced to control the structure and functioning of these schemes.

At present three types of medical schemes exist. They are medical aid schemes, medical benefit schemes and exempted schemes.

Medical aid schemes and medical benefit schemes are registered in accordance with the Medical Schemes Act (No. 72 of 1967) while exempted schemes are excluded from this act. The Medical Schemes Act defines certain base requirements with which registered medical schemes must comply.

The number of schemes has however progressively decreased in the last decade. In 1980 there were a total of 289 schemes, of which 214 were registered medical aid schemes while at the end of 1989, there were a total of 250 schemes, of which 189 were registered medical aid schemes, 18 medical benefit, and 43 exempted schemes (Registrar of Medical Schemes 1990). According to the latest report of the Registrar of Medical Schemes (1996:1) there were 176 medical schemes.

### ***3.2.1.1 Medical Aid Schemes***

A medical aid scheme is defined as (Medical Schemes Act No. 72 of 1967:2):

*“ A medical scheme of which the rules provide for rendering of medical and dental services to the members thereof and to the dependants of such members by medical practitioners and dentists of their own choice.”*

A medical aid scheme is a form of health insurance that pays for the services received by members and dependants from practitioners of their choice.

The scheme pays for the cost of medical care, within the limits of a specific package of benefits. Providers are paid on a fee-for-service basis and medical schemes effectively guarantee payment to health care practitioners if they charge according to the scale of benefit. (Medical Schemes Act No.72, 1967).

Employers usually establish medical aid schemes, or negotiate medical coverage on behalf of employees with individual schemes, and require their employees to join these schemes. Employers usually contribute 50 percent of the monthly fee (Reitz 1984:217).

Open and closed schemes merely refer to the membership boundaries of schemes. A closed scheme comprises members belonging exclusively to a particular organisation whilst open schemes are not restricted to members of one organisation only.

### ***3.2.1.2 Medical Benefit Schemes***



The Medical Schemes Act (No. 72 of 1967:2) defines a medical benefit scheme as:

*“ A medical scheme of which the rules provide for the conclusion of an agreement between such scheme and any medical practitioner or group of medical practitioners or any dentist or any members of such group of dentists, as the case may be, by way of a salary or by way of an amount calculated on the basis of the number of members of such scheme and dependants of such members for whose treatment such medical practitioners or such dentists or such members of such group of dentists, as the case may be, is under such agreement responsible”.*

Medical benefit schemes contract with specific providers of health services who are usually paid a capitation fee to provide services to its members (Broomberg and Price 1989:2).

The curative benefits offered by benefit schemes are generally less comprehensive than those provided by medical aid schemes. Many of these schemes operate their own hospitals and members do not have a free choice of practitioners. The benefits offered by medical aid schemes are usually more comprehensive from a curative perspective and hence the contributions paid are higher than is the case with medical benefit schemes. Medical aid schemes generally operate for the higher income, more skilled group, whilst medical benefit schemes cater for the lower paid, usually semi-skilled or unskilled worker(Dorrington 1985:108).

In fact in South Africa the old medical benefit societies were, in principle very similar to managed health care organisations. In these schemes members and employers contributed monthly or weekly but they received medical care provided by the scheme itself. The scheme provided services through the employment of its own general practitioners and medical specialists. However, these benefit societies developed a poor reputation because they were attempting to provide health care on such low budgets that it was impossible to provide a reasonable quality of care.

### ***3.2.1.3 Exempted Schemes***

Section 2(1) of the Medical Schemes Act allows schemes to apply for exemption from complying with certain requirements. Although many of these schemes operate on a fee-for-service basis, they are free to draw up their own tariff of fees and are not compelled to guarantee payment to providers (Veliotis, Magennis and Brown 1993:18). These are known as exempted medical schemes. The following schemes are exempted:

1. PLOYMED The medical scheme for the South African Police
2. MEDCORR The medical scheme for the employees of the South African Prison Service
3. TRANSMED The medical scheme for the employees of the South African Transport Services

The above schemes were founded in 1982 and although they are not bound by the Act, they operate on a fee-for-service basis and generally abide to the scale of benefits as determined by Representative Association of Medical Schemes (RAMS). These schemes are not compelled to guarantee payment to providers. The above schemes receive large subsidies from the various public sectors, which they serve, and they generally provide generous benefits to their members (Reitz 1984:219).

#### 4. SCHEMES CREATED BY INDUSTRIAL LEGISLATION

Certain schemes were established in terms of Industrial Council agreements. There are two categories:

- ⇒ Industrial Council Medical Aid Schemes
- ⇒ Industrial Council Medical Benefit Schemes

Industrial Council Medical Aid Schemes exist mainly in industries in which the trade unions are organised on a craft union basis and hence cover mostly skilled workers. Their benefits range between those offered by commercial medical aid schemes and those offered by medical benefit schemes. They are controlled by local industrial councils and are responsible to the Minister of Manpower. The fees in The Scale of Benefits do not bind practitioners, and there is no fixed regulation and central control of these schemes. (Prinsloo 1985a:2).

Industrial Council Medical Benefit Schemes on the other hand occur predominantly in industries where industrial unions operate. Generally

the benefits offered are more restricted and do not cover dependants (Dorrington 1985:107:109).

### *3.2.2 THE MEDICAL SCHEMES ACT*

Following recommendations of the Coertze Commission (1965) which investigated medical schemes in South Africa, schemes were regulated in terms of the Medical Schemes Act (No. 72 of 1967). There have been several amendments to this Act since its introduction. This section will highlight the main features of the present legislation.

#### *3.2.2.1 Benefits Covered*

Regulation 4(1) of the Act prescribes that a registered medical scheme must provide benefits for services provided by:

- Medical and surgical services rendered by a medical practitioner
- Dental services rendered by a dentist
- Physiotherapy services rendered by a physiotherapist
- Supply of medicines obtained on prescription
- Accommodation in a Provincial or Government hospital.

The specifics on benefits paid out vary from scheme to scheme and depend largely on the funds available. Regulation 4(2) includes conditions that are not covered by the Act and medical schemes can exclude them, if they want to e.g. treatment of obesity or cosmetic surgery.

### *Minimum and maximum benefits and exclusions*

The Act specifies the minimum and maximum benefits to which a member is entitled in respect of services covered in section 4(1) of the regulation.

Dependants are entitled to all benefits allowed to members. The minimum benefits to which a member is entitled to are:

- Where a scale of benefits tariff exists for services covered, the scheme must pay at least 70 percent of this tariff.
- Where no scale of benefit tariff exists, the scheme must pay at least 50 percent of the difference between the cost of the service and the levy (up to a maximum of R10) that the scheme may impose.
- The total annual limit for the scheme must be at least R1000 for a single member, R2000 for a member with one dependant and R2 500 for a member with more than one dependant.
- The minimum benefit for a service as mentioned in regulation 4(1) may not be less than R100 per member per financial year.

Regulation 5(3) specifies the **maximum benefits** payable by a scheme for a service provided. Where a scale of benefits has been drawn up, the benefit paid shall not be more than 100 percent of the stipulated tariff. Where no scale of benefit has been determined, the benefit paid may not exceed the cost of such a service. More recently the Registrar

of medical schemes has exempted certain schemes from this provision, thus allowing them to pay out in excess of the scale of benefits (Broomberg 1991:415).

With effect from September 1990, the Registrar of Medical Schemes allows schemes to request permission to pay more than The Scale of Benefits, should they choose to (Broomberg 1991:416).

#### 3.2.2.2 *Tariff Legislation*

Private fees for medical and dental services are set out in *The Guide to Fees for Medical and Dental Services*. The Scale of Benefits is published in the Government Gazette and it covers fees paid for the supply and services of doctors, dentists, physiotherapists and private hospitals (Prinsloo 1985b:7).

The price of medicines is not stipulated in The Scale of Benefits. It is printed in The Monthly Index of Medical Specialities (MIMS) which is a monthly publication providing both the wholesale and retail prices of ethical medicines.

The setting of a tariff acceptable to both providers and financiers of health care represents a long-standing issue of much disagreement and conflict (Mandell 1986:2). The option that a doctor had to be contracted in or out was abolished during the 1984 amendments and since then practitioners have been free to charge according to The Scale of Benefits published by RAMS, or the recommended tariffs

determined by the various professional Associations (Medical Association of South Africa and Dental Association of South Africa).

Tariff calculations comprise two stages: the use of units and the rand value. Units are drawn up independently by the professional Associations and are determined according to the complexity of the procedure and in recognition of academic training (Prinsloo

1985a:2). Once the relative unit structure has been determined, RAMS and the professional associations (Veliotis et al 1993: 18) link rand values to these units.

Table 3.3 illustrates an example of the interaction of the two components in the setting of the general practitioner's fees for a first consultation (MASA Pamphlet 1991b).

**Table 3.3: Units versus Rand values further broken down to show the normally applied Scale of Benefits versus the recommended MASA tariff**

| Year | Unit | MASA<br>ariff     | Scale of Benefits |
|------|------|-------------------|-------------------|
| 1980 | 6    | R6,60 -<br>9,00   | R6,60             |
| 1981 | 6    | R7,20 -<br>9,90   | R7,20             |
| 1982 | 6    | R8,40 -<br>11,40  | R7,70             |
| 1983 | 6    | R9,30 -<br>12,60  | R8,80             |
| 1984 | 6    | R10,50 -<br>14,10 | R9,50             |
| 1985 | 6    | R12,60            | R9,50             |
| 1986 | 9    | R22,50            | R13,60            |
| 1987 | 9    | R27,00            | R13,60            |
| 1988 | 9    | R27,00            | R15,00            |
| 1989 | 10   | R33,00            | R17,50            |
| 1990 | 12   | R48,00            | R21,10            |
| 1991 | 12   | R55,20            | R24,80            |

Source: MASA Pamphlet 1991b

As illustrated in Table 3.3 RAMS and the representative associations (MASA and DASA) allocate their own Rand value to units. The effect of this dual system of tariff determination of medical and dental



services, has resulted in a widening disparity between the Scale of Benefits and the recommended tariff.

#### *3.2.2.3 The Browne Commission*

In late 1986, the Browne Commission of Inquiry into Health Services was released. The general recommendations were:

- Additional cover should be insured by a voluntary insurance system;
- The medical scheme movement should consider Health Maintenance Organizations<sup>8</sup> and Preferred Provider Organisations, as developed in the United States;
- Alternative methods of providing health care should be seriously looked at;
- Greater flexibility in contribution rate determination should be allowed, thus enabling schemes to underwrite and charge different contribution rates for different classes of risk.

#### *3.2.2.4 The 1989 Amendments*

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<sup>8</sup> Health Maintenance Organisations are medical funder's that apply principles of managed health care.

Prior to September 1989 medical schemes were allowed to determine contributions only on the basis of family size and income. Risk sharing, cross-subsidisation and equal access to health services, were therefore allowed by the provisions of the Medical Schemes Act.

#### *3.2.2.4.1 Payment of Accounts*

Section 32 of the Act effectively guarantees direct payment to the practitioner within 4,5 months. In order to qualify providers must charge according to The Scale of Benefits. If a provider does not charge according to The Scale of Benefits, he/she forfeits the right to guaranteed payment and the medical scheme may choose to reimburse the member, who is in turn responsible for settling the provider's account.

The "guarantee of payments" tied the hands of medical aids when attempting to exert control on the abuse of the system as they were unable to deny payment when unsatisfied with the information presented.

#### *3.2.2.4.2 Cross-subsidisation versus risk rating*

There are essentially two basic methods used in calculating the monthly premium for member contributions. They are cross-subsidisation and risk rating (Broomberg 1991:415).

##### *Cross-subsidisation (community rating)*

Cross-subsidisation refers to a system where membership fees are pooled to meet the costs of medical care for all members regardless of age, income and previous medical history. The benefits are that ageing members are guaranteed medical cover in their old age without additional costs.

*Risk rating (experience rating)*

Risk rating refers to a process of setting member contribution rates based partially, or wholly, on previous claims experience for a specific member group.

Up until 1989, the Medical Schemes Act allowed member contributions to be calculated only according to income and family size (Veliotis 1993:21). In order to meet the needs of the younger members the 1989 amendments to this Act permit stratified contributions and therefore effectively allowed experience rating. These amendments have also allowed medical schemes to introduce low-claim and no-claim bonuses as an incentive for members to utilize services prudently.

*3.2.2.4.3 The role of insurer in health care*

The Medical Schemes Act precluded insurance companies from underwriting health care cover. The difference between health costs to the patient, and those paid by the medical aid, has resulted in the

introduction of insurance products which include hospital plans, major medical and dreaded disease policies, and plans which fund the difference between the scale of benefits and the private tariff. This protection is paid as a cash payment directly to patients and therefore the constraints of the Act are bypassed (Veliotis et al 1993: 20).

These plans make payment based on events and generally do not provide comprehensive medical cover. They are popular among people who self-insure against minor and frequency ailments, but who also require medical insurance for serious illnesses necessitating hospitalisation. Recently some packages have been linked to other financial instruments such as endowment policies.

The Medical Schemes Amendment Bill has introduced increased flexibility and it is likely that there will be a closer association between insurers and medical schemes in the future.

### **3.3 PROBLEMS THAT HAVE PLAGUED THE INDUSTRY**

Veliotis (1991:76) is of the opinion that the combination of fee for service system, the guaranteed payment, the statutory scale of benefit, and the minimum and maximum benefit levels as being prominent reasons resulting in the cost crisis facing the medical aid industry.

In a survey conducted by Veliotis (1991:79) respondents accused RAMS of setting the scale of benefits too low. They claim that the low scale of benefits is the primary reason forcing health care providers to

increase the supply of services in an attempt to increase economies of scale. It also came to the fore that minimum benefit levels afford members first Rand cover and provided no incentive for members to be cost conscious. As a result there is an inappropriate over-demand for services.

### *3.3.1 RISING COSTS OF HEALTH CARE*

There are many reasons why the cost of health care both in the private and public sectors have increased. Advances in medical technology, the development of new more expensive drugs, and the fall in the Rand exchange rate (which increased the cost of imported goods in the health sector) have all contributed to the increases.

However the increase in the private sector has been substantially more than the increase in the public sector. The real, per capita,

increase in medical schemes has been running at a compound 9,64 percent a year since the early 1980's. Cumulative inflation rates for specialists, private hospitals and medicine over the five years to 1995 were 201 percent, 270 percent and 185 percent respectively. The cumulative total inflation for all health care sectors over the same period was 152 percent (Financial Mail 1997:9). Empirical evidence supports the above observations.

- Enthoven (1980:28) attributes the tremendous growth, complexity and cost of medical technology as a major factor contributing to the increased spending on medical costs. The system may be more responsive to beneficial medical breakthroughs and new technology as providers are free to buy and use them. How beneficial some new technology may be relative to its cost, is however often not clear.

Since most sophisticated medical equipment needs to be imported to South Africa, the problem is compounded by the devaluating currency against most major international currencies.

- More use of higher cost specialists rather than primary care (e.g. general practitioner) services i.e. more emphasis on curative as opposed to preventative measures.
- A similar case can be made for the cost of pharmaceuticals. Where providers have merely been using an ethical<sup>9</sup> drug

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<sup>9</sup> An ethical drug is the original research based patented drug.

without considering the efficacy of the cheaper generic<sup>10</sup> equivalent.

- Inefficiencies through duplication of services and facilities.

The Department of Health contends that member contributions to medical schemes are inflated by up to 25 percent due to abuse and fraud, relating to health care benefits (Southern Health Care, Autumn, 1998:6).

The ultimate reason for this is that there are no cost containment mechanisms - no incentives to be efficient and reduce expenditure - in the private sector. The cause of this lies in the structure of the private sector around “fee-for-service” payments and “third party payment systems”.

### ***3.3.1.1 Third party payment and the fee-for-service system***

The financing and provision of health care in the private sector prior to managed healthcare (MHC) has generally been characterized by:

1. “third party” payment and
2. fee-for-service system.

Under the “third party” payment system consumers bought health insurance from medical aid schemes. When patients required health

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<sup>10</sup> A generic drug is an imitation of the original drug, but contains the same active ingredients

services, they consulted doctors or other health professionals (providers). Medical aid schemes then paid the providers for any services rendered according to a schedule of tariffs set yearly by the RAMS. Under the fee-for-service system, medical schemes paid according to the particular services provided.

These arrangements have predisposed to escalation of health care costs in the private sector in two main ways. Firstly, because doctors will be paid for any services they provide, and paid more for more expensive procedures, providers have an incentive to “over treat” and “over investigate” patients (provider moral hazard). Secondly, consumers do not have to face the direct cost of any services rendered (although in the long run they will have to pay higher medical scheme contributions). They may thus be more likely to consult doctors unnecessarily and less likely to lead healthy lifestyles (consumer moral hazard). Consumers may also be less likely to exert pressure on providers to ensure that unnecessary expensive treatment, consultations, tests or procedures are not prescribed. In short, medical schemes have been able to exert little influence over either providers or patients to control escalating costs. These consequences are better reflected by the following conclusions:

- Broomberg and Price (1990) found that caesarean section rates in the private fee-for-service medical aid sector was 50 percent greater than at the Johannesburg Hospital (a public referral centre), strongly suggestive that fee-for-services payment of

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in the same dosages.



doctors in the medical aid sector led to increased intervention in delivery.

- Research by Milliman and Robinson in the United States shows why the market is moving from fee-for-service remuneration to managed care programmes encapsulating utilization reviews. Unnecessary costs generated under this system were reckoned to be 53 percent:
  - hospital admissions generated unnecessary costs totalling 24 percent,
  - in-patient services 62 percent,
  - day hospital surgery 58 percent and
  - visits to doctors 49 percent.

Certain possible advantages of the FFS/medical aid system should be noted, however. These are:

- Patients are free to choose their own doctors and medical aids according to the quality of service and value for money that they feel they provide. Unfortunately for consumers of health care, while they may have some information on outcomes of care, they seldom have the medical expertise to assess the quality of care which they receive and have to rely on doctors to act as their “agents” in deciding what services they need.
- Providers are rewarded for greater effort and quality of service.

### 3.3.1.2 Provider reimbursement

The two largest costs to medical aids, accounting for over 50 percent of medical aid expenditure, are pharmaceuticals and private hospitals. Table 3.4 reflects growth in annual costs under each category. It reflects that the compounded growth, in both categories, considerably outpace that of other health disciplines, especially the price increases at provincial hospital level.

**Table 3.4: Contribution to total health care expenditure**

|                         | 1990<br>percent | 1991<br>percent | 1992<br>percent | 1993<br>percent | 1994<br>percent | Average<br>percent |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------|
| General Practitioners   | 14,6            | 14,0            | 11,5            | 10,5            | 10,4            | 12,4               |
| Specialists             | 16,4            | 17,0            | 17,0            | 18,0            | 18,5            | 17,4               |
| Dentists                | 10,1            | 10,0            | 9,7             | 9,0             | 8,4             | 9,4                |
| Provincial Hospital     | 5,2             | 5,0             | 4,3             | 3,7             | 2,9             | 4,3                |
| Private Hospitals       | 18,5            | 17,3            | 17,5            | 18,7            | 22,1            | 18,8               |
| <i>Hospital (total)</i> | 23,7            | 22,4            | 21,9            | 22,4            | 25,0            | 23,1               |
| Medicine                | 27,4            | 29,0            | 31,8            | 32,9            | 30,5            | 30,3               |
| Exgratia                | 0,3             | 0,3             | 0,3             | 0,3             | 0,3             | 0,3                |
| Other                   | 7,6             | 6,9             | 7,0             | 6,8             | 7,0             | 7,1                |

Source: Sunday Times. Business times, May 4 1997

**Table 3.5: Growth in annual medical costs per member**

|         | 1990<br>Percent | 1992<br>percent | 1993<br>percent | 1994<br>percent | 1995<br>percent | Average<br>percent |
|---------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------|
| General | 24,0            | 8,0             | 5,0             | 11,0            | 14,0            | 12,4               |

|               |      |      |      |       |       |      |
|---------------|------|------|------|-------|-------|------|
| Practitioners |      |      |      |       |       |      |
| Specialists   | 27,0 | 35,0 | 16,0 | 18,0  | 19,0  | 23,0 |
| Dentists      | 28,0 | 28,0 | 6,0  | 5,0   | 17,0  | 16,8 |
| Private       | 22,0 | 33,0 | 33,0 | 32,0  | 30,0  | 30,0 |
| Hospitals     |      |      |      |       |       |      |
| Provincial    | 24,0 | 14,0 | -2,0 | -10,0 | -25,0 | 0,2  |
| Hospitals     |      |      |      |       |       |      |
| Medicine      | 37,0 | 45,0 | 19,0 | 6,0   | 14,0  | 24,2 |
| Other         | 19,0 | 33,0 | 12,0 | 9,0   | 27,0  | 20,0 |
| Total         | 29,0 | 31,0 | 15,0 | 11,0  | 18,0  | 20,8 |

Source: Sunday Times. Business times, May 4 1997

### 3.3.2 *OTHER PROBLEMS THAT HAVE PLAGUED THIS INDUSTRY, INCLUDING LEGISLATIVE CONSTRAINTS*

- Section 22 of the Pharmacy Act, which protected retail pharmacies, prevented free market forces from operating in the retail pharmacy industry. It restricted the ownership of pharmacies to pharmacists. Section 22 is currently being amended to extend ownership of pharmacies to other parties, e.g. retail stores. This should allow for a more competitive environment, which should in turn benefit the consumer.
- Generic substitution of medicines was prohibited. In 1997 the Health Ministry began making a case in favour of mandatory generic substitution in both the private and public sectors.
- The advertising of prices of ethical medicines are prohibited.
- The ethical codes of the South African Medical and Dental Council (SAMDC) promote and protect doctors' interests.

- Legislation prevented managed care models from being actively introduced.
- The Medical Schemes Act provided protection to the member in respect of the member's relationship to the funder (medical scheme). The focus of the Act was to protect the interests of the provider of the service, the consumer, (members and their families) who paid contributions to sustain the providers were of secondary importance. Protective measures built into the Act included statutory tariffs, obligation on the funder to pay direct to the provider of service with no knowledge of and regardless of whether the service provided was adequate, inadequate or provided at all. The only requirement for payment was an account, which the provider would submit direct to the funder. Major amendments to the Act were implemented on 1 January 1994 that had the effect of changing the relationship between provider of service and the funder but which continued to ignore protection of the member in respect of quality and appropriateness of care. (Southern Healthcare Vol. 2, No. 1 :6).
- Day clinic licenses were frozen whilst hospital licenses were still granted.

Barriers to entry were created as a result of legislation: Section 2 of the Medical Schemes Act (No. 72 of 1967) prevents the direct entry of insurance companies into the health insurance market. Yet many

insurance companies do provide hospital and dreaded disease policies (Medicine Today 1990:2). They also provide benefits for the differences in the fees charged by health care providers and what medical schemes pay. Since the protection is paid as a cash payment directly to patients, the constraints of the Act are bypassed (Business Day 1991:12).

- No grip/control on soaring costs because of the arms length transaction with the providers of health care and the lack of influence on care given.
- Increased bargaining power of suppliers of medical aid funds.
- Employers have played a passive role in the whole health care process. However, since the escalating medical aid costs require an increasing amount of money from the companies, many employers are taking active steps to control the process. Some are introducing cash payments at the point of service whilst others are placing limits on the amount of consultations a member can have per year.
- The introduction of the 1989 amendment effectively allowed medical aid schemes to risk rate members. This has resulted in the fragmentation of members, which could therefore reduce their bargaining power.

- No restriction on provider choice (e.g. unethical practices when relatives get involved).
- Under the current legislation, because of the combination of fee-for-service remuneration coupled with guarantee of payment, medical schemes have had little control over the health care process. The bargaining power therefore lies with the health care providers (Veliotis 1991:33).
- Poor case management.

The above concerns reflect problems that are unique to specific sectors in the private health system. The common thread that runs through the above issues was that many legislative and ethical codes deterred the efficient operation of free market forces. Slowly these are being relaxed e.g. allowing for the formation of Health Maintenance Organisations that implement full managed health care programmes. The more specific issues that need to be addressed now sit in the hands of inefficiently run medical aid companies.

### 3.4 CONCLUSION

It is obvious from the above discussion that much is left to be desired in the application of risk management in the South African medical aid industry. The inefficiency in the system can be attributed to various factors, but the more pivotal issues would be:

- The inequalities in health distribution in the country.
- Both the private as well as public sectors are administered rather than managed with poor utilization of information.
- Prohibitive legislation has handcuffed medical funders in their attempts at managing risks.

The following chapter will explore the topic of risk management in health care funding in more detail.

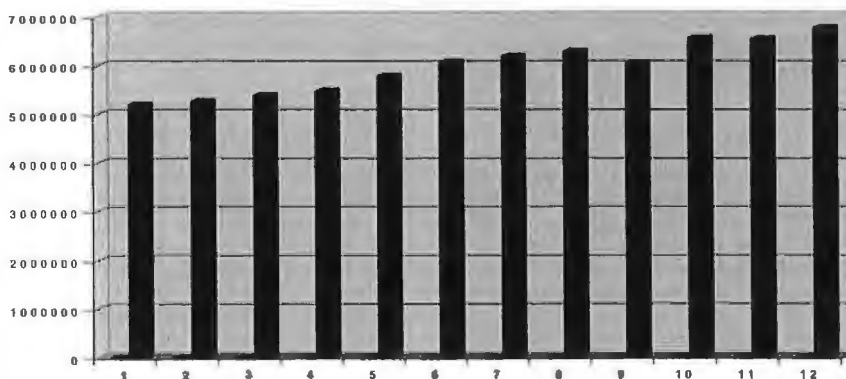
## CHAPTER 4: RISK MANAGEMENT STRATEGY IN HEALTH CARE FUNDING

### 4.0 INTRODUCTION

The growing interest in alternative risk management strategies such as managed healthcare in South Africa arises principally out of the crises experienced by the private health sector. The current health care environment is characterised by declining coverage, increasing costs and displacement of unwanted costs onto the public sector.

The annual income of medical schemes during 1982 amounted to R883 million, of which R875 million was paid in benefits and expenses during that year (Dorrington 1985:107). In 1995, the medical schemes had a total income in of R15,9 billion of which a total expenditure of R16,1 billion was deducted (Registrar of Medical Schemes 1995: Annexure A).

**Graph 4.1: Medical aid members in the years 1984 - 1995**





Source: Registrar of Medical Schemes 1994 and 1995

This 12 fold increase was not proportionately matched with an increase in membership, as reflected in Table 4.1, which only appreciated by 30% in the stated period, but was rather as a result of spiralling costs in the health care industry.

Medical schemes have tried to minimize cost increases simply by resisting demands for fee increases by providers, rationing benefits and risk rating members. On the other hand they have continued to increase medical scheme contributions. In terms of risk management principles this is arguably insufficient.

Little has been done to analyse future risks and control current risks. Much over-servicing and abuse has gone undetected. This argument becomes clear when one looks at the cost of a standard procedure such as tonsillectomy where the variation in extent of treatment is minimal yet on analysing statistics on cost variations claims received by Fedhealth in 1997, it was apparent that costs paid by the medical aid banded around two standard deviations, with no plausible explanation, risk evaluation and/or treatment.

There is also a concentration on curative rather than preventative intervention. In this environment the health care of patients is unlikely to be handled in a consistent and holistic fashion. They may become more likely to consult doctors unnecessarily and less likely to lead healthy lifestyles in order to avoid incurring cost in the longer term (consumer moral hazard). Thus neither patients nor providers have an

incentive to limit services used. These actions indicate that medical aids have played a minimal role in handling risks, neither by exerting an element of control on providers nor by treating a member's health in a holistic manner in order to better control future health risks.

In summary, medical schemes have been able to exert very little influence over either providers or patients to control escalating costs.

Because of the lack of incentives to control costs, fee-for-service and third party payment have led to:

- Emphasis on expensive new technologies and procedures;
- More use of higher costs specialists ;
- Inefficiencies through duplication of services and facilities;
- Questionably high hospital admissions.

The FFS and third party payment modes have also lead to fragmented provision through many independent practices that has resulted in little co-ordination and rationalisation of services. It has been difficult to research the efficiency and quality of service provision as provider practice styles has been very varied and patients' utilization of services have been difficult to track. Thus crucial elements about basic health priorities and cost effectiveness has not been available.

#### **4.1 RISK MANAGEMENT PRINCIPLES IN THE MEDICAL AID INDUSTRY**

The risk management process has three basic components, as explored in the previous chapter. They are:

1. Risk Identification
2. Risk Evaluation
3. Risk Treatment i.e. risk control and risk financing.

Historically risk management in the medical aid industry has been most closely connected with the finance evolving from insurance management. This is still an important aspect of the function of health insurance but should not be considered in isolation. The other tasks of risk management should not be ignored and management should set objectives, which will take these into account.

In formulating a strategy for the medical aid industry in South Africa this report will explore a combination of health funding options:

- A **first generation product** relates to the traditional medical cover i.e. comprehensive coverage. In this case the insurer reimburses the full cost of medical care to the insured.
- **Second generation products** introduce disincentives such as Co-Insurance Schemes, Deductibles and Bonus and Rebates. These options represent deviations from comprehensive coverage. These deviations could relate to (1) the type of health goods included in the plan, (2) the type of providers allowed to deliver certain

services, and (3) the extent of compensation paid by the insurer. Limitations in terms of expenditure present the most general case (Zweifel 1996:158). Caps on expenditure are usually meant when people refer to "cost sharing by the insureds".

- **Third generation products** or "new generation products" explore options of medical savings accounts and claims management.
- **Fourth generation products** encapsulate managed health care. The final – **fifth generation**, which falls outside the scope of this study, offer capitated products and closed networks<sup>11</sup>.

#### *4.1.1 FIRST GENERATION PRODUCT*

##### *4.1.1.1 Tradition Medical Schemes*

Under the traditional scheme the comprehensive funding of benefits was characterised by a pay-as-you-go, non-profit structure based on fee-for-service and predetermined negotiated agreements on

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<sup>11</sup> Patients must visit certain designated health care providers which are contracted with the scheme and who are remunerated on a set fee per member under books per month.

remuneration structures. Contributions were based on a number of criteria, including income, number of dependants, group experience rating and age of principle members. Members are generally afforded flexibility of care by means of multiple benefit options (Registrar of Medical Schemes 1996:5).

A general problem with most conventional forms of insurance is that low utilization by consumers goes unrewarded. In partial or full coverage plans, low utilizers may be reassured by the fact that if the need arises, a portion or even the full cost of care will be paid by the insurer. But invariably there may be a strong feeling that benefits of the insurance are “lost” if no medical services are consumed. There is typically no way to convert this foregone insurance benefit to some other form of reward. Apart from the physical security of knowing he or she is insured there is no way for the insured person to benefit from conventional forms of coverage unless services are utilized. This lack of reward for low utilization encourages unnecessary use of the system.

A second related problem in conventional insurance plans is the lack of direct incentives for consumers to adopt healthier lifestyles. Although some private plans offer lower premiums to non-smokers, non-obese, or other groups who exhibit lower health risks, once an individual is enrolled in such plans there is little, if any, reward for maintaining or further improving personal health habits. The significance of this second flaw in the structure of conventional insurance grows as we acquire additional empirical evidence that lifestyle strongly influence

the incidence of major disease and the cost of health care (Manning, Keeler, Newhouse, Sloss, Wasserman 1991:1).

Given that the traditional method of providing cover has been covered extensively in previous chapters we will now deal with alternative methods.

#### *4.1.2 SECOND GENERATION PRODUCTS*

Conventional insurance does little to exert a recognisable influence on the demand for and outlay of medical care. Second generation products explore options of cost sharing as a means to influencing demand. Conventional cost-sharing arrangements do limit the demand for medical services, even among members of private insurance (Zweifel 1992:12).

##### *4.1.2.1 Co-payment schemes<sup>12</sup> and Deductibles*

###### *4.1.2.1.1. Co-payment*

Consumers derive protection from health insurance by knowing that when expenses are incurred they will not have to pay the full amount out-of-pocket. Indeed, under full insurance (zero co-insurance), out-of-pocket expense is zero regardless of the full expense.

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<sup>12</sup> Question 3.1. of the Interview Framework addresses the issue of co-payment by South African medical aids.

Thus conventional insurance, particularly full coverage, reduces the financial risk associated with illness, but also diminishes the consumer's sensitivity to the true cost of care, this in turn may lead to excessive utilization (i.e. moral hazard). One way to discourage unnecessary utilization in conventional insurance plans is to impose a proportional cost sharing. Cost sharing relies on the negative cost sanction of cost sharing at the time of consumption of care as the sole means for limiting moral hazard.

#### *4.1.2.1.2 Deductibles*

In this case the insured person pays the first  $x$  monetary units of his total health expenditure out of his own pocket. The effective price therefore amounts to the supply price as long as total expenditure is relatively low (up to  $x$ ). Above this threshold it drops to zero. If the insured expects to exceed this level in the course of the period anyway, then the incentive for cost effectiveness in consumption vanishes from the beginning. Nevertheless this form of co-payment is widespread as it relieves the insurer from the processing of petty claims, as claims with a total value of below  $x$  will never be submitted (Zweifel 1996:160).

Insureds covered by a policy without deductibles basically have an incentive to submit all of their medical aid bills. Zweifel (1992:5) found that for minor illnesses, giving rise to annual bills up to the neighbourhood of the value of the deductibles, the deductible should have a stronger impact on the intensity of treatment than does co-

insurance. For bills sufficiently beyond the limit, the deductibles should have no effect, while co-insurance should lose its effect more and more.

The co-payment plans and deductibles are a slight improvement on conventional insurance in that it adds weight to risk control where the incentive to abuse is reduced by the members having to co-pay.

#### ***4.1.2.2 Bonus and Rebate Options<sup>13</sup>***

##### *4.1.2.2.1 The dynamic bonus system*

Under the “dynamic bonus” system the insureds' merit rating depends on claims submitted in a number of previous years. In the Zweifel (1992:70) study, the insurer offered two monthly premiums worth of rebates for no claims at the end of the first year without claims, three monthly premiums at the end of the second year and a maximum of four starting in the third consecutive year without claims. Given the number of years, compared to the yearly bonus system, the dynamic system requires a longer planning horizon. Zweifel concluded that the subsequent year might induce a member to refrain from treatment at the ambulatory level even if their billed value exceeds the value of the bonus at stake. This could be detrimental to the management of health risk in the longer term.

##### *4.1.2.2.2 Fixed rebates for no claims*



In this case the insurer has a tradition of paying back a rebate for no claims at the end of a year. This rebate to members, who did not claim for medical services, amounts to three monthly premiums. In order to obtain it, the insured must be without claims under all three titles of the plan (ambulatory, hospital and dental). This is an added difficulty for the risk manager when analysing and treating risks as the insured must then decide whether or not he/she wants to submit the bill for the lower end costs. Zweifel (1992: 42) says that the decision to submit a medical bill rather than paying it out-of-pocket gains importance. The insured will then weigh up the benefits of submitting the bill versus the benefits of receiving a rebate for no claims at the end of the year. The premium rebate at stake determines a threshold value that must be exceeded by a bill to making it financially advantageous to submit it to the insurer. However, such a system is quite demanding in terms of the optimisation calculus required on the part of the insured: He/she must gauge the probability of being able to save his bonus during the following year, which requires an assessment of the likelihood of future loss of health and their severity (Zweifel 1992:13). Moreover, he/she must also predict his future financial wealth to determine his/her ability to pay for health care out-of-pocket. Furthermore, the decisions to consume ambulatory<sup>14</sup>, hospital and dental care became interdependent in view of the rebate for no claims. For example, the dental bill would still have to be paid out-of-pocket if the insured managed to save his/her rebate by consuming no ambulatory and hospital care. Thus, by using up a part of the rebate at stake, a dental

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<sup>13</sup> Question 3.2. of the Interview Framework deals with the issue of bonus options in the South African Medical funding industry.

<sup>14</sup> Termed day care in South Africa

bill will undermine the insured's incentive to refrain from ambulatory medical care in his/her attempts to save his/her rebate.

Zweifel (1992:52) concludes that the incentive in a rebate contributed to the choice of a reduced intensity of treatment, at least as long as the expenditure associated with the alternative courses available do not exceed the point of financial equivalence in all cases.

#### *4.1.2.2.3 Relative success of new scheme options*

A study conducted by Peter Zweifel of the University of Zurich, Department of Economics, Switzerland (Zweifel, 1992) analysed the relative success of co-insurance versus deductibles, and co-insurance versus rebate and bonus options as a means of curtailing overuse of the health services (more specifically looking at ambulatory care). Fixed rebates in the study amounted to three monthly premiums for no claims during the year. The experience-rated bonus system had a rebate amounting to a minimum of two and a maximum of four monthly premiums. The main findings of the study can be summarised in the following statements:

- Since the insured has no financial interest in submitting a bill the value of which is less than the deductible, the billings/cost distribution will, in general, be thinned out at its lower end for reasons that have nothing to do with the demand for medical care.

- High values of annual medical bills will, to some extent, reflect especially severe illness episodes during which the urgency of demand overrides considerations of cost. In all, the effect of co-insurance, while still discernible at values of billings where a deductible has lost its impact, should fade towards the upper end of the cost distribution as well i.e. cost sharing provisions generally tend to lose their impact farther up in the distribution of annual billings.
- Under rebate and bonus options, the insured finances the rebate in advance, which entails a loss of interest payments, compared to the lower premium of a policy with conventional cost sharing. Frequently however, this drawback will be outweighed by the advantages of temporal separation of the occurrence of two risks, “loss of health” and “net financial outlay for medical care”, as under rebate and bonus options immediate cost sharing by the insured can almost always be waived.
- Fixed rebates for no claims, while exposing the insured to no greater financial risk than conventional cost-sharing policies featuring deductibles and co-insurance, limited moral hazard in day-to-day care to the extent that is comparable with conventional cost-sharing policies. The dampening effect of an experience-rated, variable bonus for no claim tends to even exceed that of a financially equivalent fixed rebate.

#### ***4.1.2.2.4 Summary***

Compared to conventional insurance i.e. featuring comprehensive coverage, deductibles and/or co-insurance rates amounting to more than 20 percent of the claim, significantly lower the probability of high bills of ambulatory medical care (which is generally believed to respond more strongly to insured-based incentives than hospital care).

Zweifel (1992:4) found that the bonus option exerts a stronger financial incentive to limit demand than does a fixed rebate. This is so because the bonus option promises an even higher future rebate if the current period is claim free.

In comparing all three plans: co-insurance, bonus or rebate, the evidence suggests that the experience-rated bonus offer has the strongest dampening impact on demand, followed by the fixed rebate offer and first dollar coverage plans. Some limited evidence is also available supporting the view that such financial incentives, rather than jeopardising the health of the insured, may in fact turn marginally bad into good health risks. Even anecdotal outlays on hospital care might be reduced by such incentives, with rebate and bonus options once more taking the lead over conventional cost sharing.

*Advantages of new scheme options:*

- Relative to conventional insurance there is a financial incentive to limit demand.

- A sizeable portion of hospital admissions can be claimed to react to cost-sharing provisions primarily aimed at controlling moral hazard in ambulatory medical care (Zweifel 1992:4).
- The financial reward to the member, incentivises him to become a more educated consumer of health care products.

*Disadvantages of new scheme options:*

- A flaw in the study appears when applying the aforementioned alternatives to the age class above 65 years. Fixed rebate and experience-rated bonus offers for no claims may lose their impact on the demand for ambulatory care among the aged. Even traditional co-insurance shows signs of becoming less effective among this age group.
- It assumes the consumer can diagnose minor ailments and treat them. It furthermore assumes that the consumer would know when circumstances are serious enough to justify treatment.
- It only concentrates on abuse by members and does not address provider abuse.
- Health insurance options with strong financial incentives for cost control become self-defeating in the longer run if it leads to a deleterious effect on health.

- Rebates and bonuses amount to a mere shifting of costs from the insurer to the individual. From a total systems point of view, no resources have been saved at all if the amount of medical services consumed remains unchanged. The crucial issue is the adjustment of behaviour which results in a reduced consumption of services.
- Small deductibles and/or co-insurance exert little recognisable influence on the demand for and outlay of medical care.
- Any increase in the co-payment rate or the deductible level will be viewed by the consumer as a reduction in insurance benefits.
- It places the bargaining responsibility in the hands of the consumers who have reduced bargaining power as individuals with less information and expertise available to them, depending on the individuals' level of education in this regard.
- Second generation products such as co-insurance, bonus and rebate options focus on short-term solutions to spiralling health care costs. They do not look at risk management in a holistic fashion by identifying, evaluating or treating risks any more than conventional insurance.

#### *4.1.3 THIRD GENERATION PRODUCTS*

#### *4.1.3.1 Medical Savings Accounts (MSA)<sup>15</sup>*

MSA are a form of self-insurance, which can only be debited for recognisable medical expenses. A MSA puts the patient back in control of medical spending through, for example, a personal savings account linked to calamity insurance. Members would then manage their own out-of-hospital expenditure with no risk premiums, that is to say, with their own funds being paid to the scheme as contributions. This assists the medical insurer in controlling member and provider abuse of the system by placing the financial risk squarely with the member. In terms thereof, the unexpected portion at year-end accumulates for the exclusive use of the member and his/her family in future.

Critics of the MSA system say there is an in-built disincentive to seek appropriate cures, due to fears of over-spending. Members may be loath to spend on low priority or preventative medical care. There is also little management of the quality or appropriateness of the care they receive. However, according to the Friedman model (Financial Mail 1998:20), payers spending on themselves will seek the best price and quality. As savings may only be transferred to a medical provider account and cannot be withdrawn for non-medical purposes, the patient is inclined to seek the most cost-effective cure. Yet one could argue that the average consumer has limited knowledge of medicine to make these decisions independently.

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<sup>15</sup> Savings Accounts in the local environment are explored in question 3.3 of the Interview Framework.

Van den Heever of the Centre for Health Policy at the University of the Witwatersrand says that MSA's are popular because they can be used for tax avoidance, but there are many problems with the MSA system. Van den Heever believes that they tend to delay early treatment because members want to keep medical expenditure to a minimum. They reduce the incentive to manage the treatment and costs by providing the wrong incentives to the gatekeeper<sup>16</sup>. They do not address the real costs at the higher levels of care, such as expenditure on hospitals and drugs, and may even worsen them (Financial Mail 1998:20).

The following summaries of advantages and disadvantages, which appear to be similar to international experience, of new generation plans have been argued by stakeholders since their inception. (Excerpt – Medscheme: Prescribed Reading- The pros and cons of medical savings accounts – October 1996 as quoted in Registrar of Medical Schemes 1996:6).

*Advantages:*

- The system arose from the need to develop disincentives for abuse and fraud and consequent spiralling cost structures in a fee-for-service payment method, which gave rise to runaway health inflation.

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<sup>16</sup> Refer to Glossary



- Behaviour of the member is changed as a result of a sense of ownership and personal responsibility to fund certain controllable health care expenses.
- There is consequently no incentive to claim unnecessarily and utilization patterns are reduced with a consequent reduction in costs.
- Members, who do not require extensive cover for out-of-hospital benefits, would benefit by this structure.
- The financial reward to the member incentivises him to become a more educated consumer of health care products.
- The bargaining power on price and utilization of services is placed firmly in the hands of the individual.
- Those who contribute more to these funds would benefit from large tax breaks, particularly under a system of salary sacrifice contribution system.
- Accumulated funds in the personal account can be utilised for future health care expenses and for retirement funding.
- Accumulated funds could be transferred to another scheme upon resignation.

*Disadvantages:*

- It assumes the consumer can diagnose minor ailments and treat them. It furthermore assumes that the consumer would know when circumstances are serious enough to justify treatment.
- It only concentrates on abuse by members and does not address provider abuse. Where savings schemes are coupled with reimbursement for actual costs incurred and not the Scale of Benefits, there is an incentive for providers to increase their prices to make up for the decreased utilization.
- It places the bargaining responsibility in the hands of the consumers who have reduced bargaining power as individuals with less information and expertise available to them, depending on the individual's level of education in this regard.
- A portion of the contribution that would otherwise be available for cross-subsidisation is no longer available for this purpose. In the event that the contribution is disproportionately large in comparison to his/her income, the member might deliberately withhold necessary treatment in order to obtain the maximum savings benefit.
- Preventative care might be withheld if the incentive not to use his/her own funds, becomes too large.

- The system would jeopardise integration into managed care options and consequent interventions.
- There is no preferential treatment in the event of a medical scheme having to be liquidated.
- If not properly administered, funds, which are advanced, may not be recovered by the scheme at a loss to other members if the member who resigns his/her membership of the scheme, fails to meet his/her obligation to repay the loan.

While these "new generation benefit plans" invited much debate between proponents and opponents, certain schemes have reported substantial reductions in claim patterns on the basis that these accounts provide members with a sense of ownership over health care spending and they would therefore utilize their own funds sparingly. For example in Singapore, where mandatory MSA systems have been in operation for 19 years, medical spending accounts for 3,1 percent of Gross National Product as opposed to 14 percent in the United States (Financial Mail 1998:20).

It is anticipated that the debate will continue with due regard to the draft policy statements from the Department of Health in which reservations have been expressed as to the feasibility of such manner of funding in terms of national health care policy goals.

#### ***4.2.3.2 Claims management***

Claims management is a risk control technique. After the delivery of a unit of health care, the provider of the service will submit a bill to the medical scheme for payment. It is at this stage that claims management comes into play i.e. after the event. In a broader managed care offering the claim manager would assess the nature of the claim and match it to the pre-authorization and concurrent review as drafted by the case manager. Yet many medical aids have started claims management in isolation as the first step towards managed healthcare. In this case claims management is merely a cost control mechanism used mainly to ensure validity of claims.

Claims management would also have under its ambit the management of the chosen provider network and the overall efficiency thereof. It would be the department liaising with the service providers, from the nurses through to the specialists, pooling all available information with a primary goal of reducing the exposure and frequency of claims.

Claims management is a loss reduction<sup>17</sup> process used in risk management. While a claims management system is not a solution to the causes of problems, it is a positive control mechanism that must be established. An effectively run system can reduce the overall cost of claims substantially.

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<sup>17</sup> Refer to 2.3.4.1

From a financial viewpoint, proper and timely claims management is a separate and distinct entity in the health care arena that can improve the medical aids profitability and affect its long-term stability.

The importance of prompt and efficient investigation of claims cannot be over emphasized. An immediate inquiry to determine the facts and circumstances of the occurrence and careful check on injuries, disability, and potential damages is important. If the risk or Claims Management Department has not been informed properly of the facts, it is placed at a substantial disadvantage.

Claims management plays a very important role in risk management, addressing risk treatment. Some literature views claims management as stand-alone health insurance options, others categorize it under the ambit of managed health care.

#### *4.1.4 FOURTH GENERATION PRODUCTS*

##### *4.2.4.1 Managed healthcare overview<sup>18</sup>*

Managed healthcare can best be described as a management process which is instituted once contractual arrangements have been made between health care consumers (or their agents) and health care providers. Its most important characteristic is that funders (medical schemes) have more influence over provision of health care through intensive auditing, management systems, and management utilization

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<sup>18</sup> Chapter 5 is dedicated to a discussion on the topic of managed healthcare.

unlike the third party/fee-for-service system where financiers and providers are separate and have conflicting interests which lead to cost escalation.

In managed healthcare, the financing and delivery of health care are effectively integrated in one organisation, creating even more direct incentives for cost containment.

Under most managed contracts, enrolled members (or their employers) generally pay a set monthly premium to a plan or fund. The plan or fund then contracts with selected providers and facilities (including, for example, doctors, nurses and hospitals) who agree to provide a comprehensive package of health care services to members for a predetermined, relatively low price. Capitation or salary payment systems or managed fee-for-service payments often substitute the traditional fee-for-service payment which reduce incentives to over-service and transfer some of the risk to the provider of health care. Furthermore, contracting providers agree to have their practice monitored regularly for cost effectiveness and quality, either by fellow doctors with the scheme (peer review) or an outside management team. This is where utilization management becomes vital.

Utilization management incorporates the aspects of appropriateness of admission, duration of stay, levels of care and efficient use of ancillary services. Utilization management is the key to maintaining a focus on the provision of expedient medical care and not losing this focus by

the perception that the medical unit is now a cost centre with cost containment absorbing too much attention.

Overall therefore, managed healthcare is promoted as a means of achieving "cost-effective" health care through active management of health care resources; reducing unnecessary care and over-servicing; controlling provider reimbursement; tailoring services to the needs identified through experience for certain groups and emphasising prevention as an alternative to expensive cures.

#### **4.2 CONCLUSION**

The new insurance options might indeed attract particularly good risks. Bad risks would gravitate towards more conventional policies, especially those offering comprehensive coverage. Hence it could be the risk selection rather than the demand of moral hazard that is responsible for the favourable performance of these new options.

Zweifel (1992:13) found that these new options i.e. co-insurance, rebates etc. created an incentive for the insured to forgo medical care in the advent of illness. "Bonus hunger" could conceivably induce insureds to defer or even forgo necessary medical treatment, jeopardising their health. The negative consequences of "bonus hunger"-would leave their traces in the patterns of outlay on medical care over time. Specifically, early savings would tend to be wiped out in the later periods.

The crucial issue is the adjustment of behaviour, which results in a reduced consumption of services. This should, however, occur in a "managed" manner where medical professionals, as opposed to the consumer, drive the process.

Managed healthcare by definition addresses many of the risk management principles as highlighted in this research. It not only deals with identifying and analysing future risks more thoroughly than ever before, with actuarial models pricing capitation levels, but it also deals with the treatment of risk by looking at healthcare in a holistic manner and exerting control through the full continuum of health care services, from the gatekeeper (general practitioner) level to post-hospital care and claims management.

By networking and tying in preferred providers managed healthcare also co-ordinates and rationalises services, hence controlling risks. In this manner it is also easier to research the efficiency and quality of services as provider practices will have to conform with predetermined protocols and utilization of patients services is easier to track. Claims management effectively treats and evaluates the risks.

Of the options explored in this chapter, managed health care is the only option that fully embraces the entire delivery of health channel.

There has been a significant shift towards a variety of managed care programmes and particularly, cost shifting and cost sharing arrangements between schemes and health care providers, inspired by incentives remuneration structures, utilization review and per diem



charges or “capitation fees”. Pre-authorisation measures for hospital care, preferred provider arrangement with specific suppliers of care and the introduction of pharmacy benefit management programmes and chronic medication programmes were explored extensively.

The following chapter will analyse managed healthcare in greater detail.

## CHAPTER 5 MANAGED HEALTHCARE

### 5.0 INTRODUCTION

The term “managed health care” was originally used to describe prepaid health care, primarily in the context of Health Maintenance Organisations (HMO). Currently it is used to describe a network of providers who have been given the responsibility of co-ordinating cost effective health care without compromising quality (Managed care Information, Definitions and Contract Considerations 1993:274; Ceslowitz 1993:336).

In order to understand what is meant by co-ordinating health care, one must understand who the role players are. In the private sector health care scenario there are three players:

- The provider of health care services, for example, pharmacist or doctor;
- The patients;
- The third party payer, for example, the medical scheme.

Historically all of the parties have worked independently. The patient sees a doctor, the doctor writes a prescription and the patient goes to the pharmacist to get the medicine. The accounts are then forwarded to the third party payer who pays according to the schedule of benefits. Managed care aims at drawing the three players into a closer, more

transparent relationship, in order to maximize the effect of the care rendered, and reduce the overall cost of these services.

Managed care has as its primary objective a reduction in health care costs and making private healthcare accessible to a broader base of the population. Despite widespread resistance, managed healthcare offers the only viable means of curbing rampant healthcare inflation, says Conradi of Hollandia Reinsurance Group (Sunday Business Times 1998:1).

The escalating costs of health care in the United States of America appear to have been reduced by managed healthcare in the last decade in particular. With the advent of managed care, the percentage of Medical Care Consumer Price Index for prescription drugs dropped by a third in the ten years between 1984 and 1994 (Vincenzino 1994:34). Vincenzino (1994:34) also found increased competition between health care providers as a result of the increase in the enrolment of new members in Health Maintenance Organisations and Preferred Provider Organizations.

Managed healthcare involves:-

- Claims management;
- The development of utilization and clinical management processes to monitor the appropriateness of medical treatment;
- The establishment of a network of service providers who contractually agree to the clinical management and utilization

guidelines in return for increased patient volumes and prompt payment;

- Sophisticated information systems that are able to integrate all aspects of healthcare, process a range of commonly used industry-coding systems (e.g. RAMS , CTP4 and IDC10) and communicate directly with existing medical aid systems.

## **5.1 THE NATURE OF MANAGED CARE**

Managed care is a formalised system of managing health care and its costs. Managed healthcare is a management process, which is instituted once contractual arrangements have been made between health care consumers (or their agents i.e. employers) and health care providers. Its most important characteristic is that funders (medical schemes) have more influence over provision of health care through intensive auditing and management systems, unlike the third party/fee-for-service system where financiers and providers are separate and have conflicting interests which leads to escalation of costs.

In managed healthcare the financing and delivery of health care are effectively integrated in one organisation, creating even more direct incentives for cost containment. Until the advent of managed care, health services have been rendered in South Africa on a fee-for-service basis. If the doctor wanted to increase the profit margin, utilization was increased and more diagnostic tests were performed. Managed care addresses this problem. Wastage and over-utilization is reduced to a minimum (Korpiel

1995:193). One of the tools used to curb over-servicing is remuneration by capitation.

Under managed health care enrolled members (or their employers) generally pay a set monthly premium to a plan or fund. Capitation or salary payment systems often substitute fee-for-service payment systems, to reduce the incentive to over-serve. The plan or fund then contracts with selected providers and facilities (including, for example, doctors, nurses and hospitals) who agree to provide a comprehensive package of health care services to members for a predetermined, relatively low price. Furthermore, contracting providers agree to have their practice monitored regularly for cost effectiveness and quality, either by fellow doctors with the scheme (peer review) or an outside management team. With capitation, managed care transfers some of the risk back to the service provider.

General practitioners play an important role in the managed healthcare process by acting as “gatekeepers”: patients may only be referred to specialists by their generalist doctor, according to the policy of the managed care operator or health maintenance organisation, thereby cutting down on unnecessary and expensive over-use of specialist services. In this way the doctor performs the function of the “gatekeeper”, who allows for access to other health care professionals. Review of their practice patterns and appropriateness is generally done by other doctors in the group i.e. peer review, not outside managers (Price 1992).

Managed health care differs from conventional health insurance in that it focuses on the longer-term health of any member, therefore cost containment is not at the expense of quality. In a managed healthcare environment more emphasis is placed on historic data and data capture, as it requires in-depth data analysis in order to identify current risks and determine potential future risks enabling the funder to better price these risks into premium income. As a result, medical aids can, for the first time, analyse the underlying risks inherent in the industry.

Overall therefore, managed healthcare is promoted as a means of achieving “cost-effective” health care through active management of health care resources; reducing unnecessary care and over-servicing; controlling provider reimbursement; tailoring services to the needs identified through experience for certain groups and emphasizing prevention as an alternative to expensive cures.

## 5.2 INSURANCE PRINCIPLES

Managed healthcare is about the management of risk, and hence insurers such as Fedsure, Sanlam, Liberty, Momentum etc. are dedicating much management time and resource to this area of business.

Insurers are well positioned to compete in the managed healthcare arena:

- They have sound actuarial skills;
- They are familiar with the concepts of risk management;
- They have typically invested heavily in sophisticated information technology systems;
- They have well-developed broker networks;
- They are well represented in all the major centres via extensive branch networks.

Most of the top insurance companies in South Africa, with the notable exception of Old Mutual (who is expected to enter this market soon), have entered the healthcare market in some or other form. Managed healthcare in itself is not the draw card for the insurance companies, but managed healthcare expertise provides opportunities to sell lucrative insurance products to the medical aid society and to individuals. So-called “new generation” medical insurance products have been launched by several insurance companies and are increasingly attracting members from the traditional medical aids.

### 5.3 UTILIZATION MANAGEMENT<sup>19</sup>

Utilization management, otherwise known as case management, is the key to maintaining a focus on the provision of expedient medical care and not losing focus by the perception that the medical unit is now a cost centre, with the greatest emphasis on cost containment.

Utilization management is defined as: “The planning, organising, directing, and controlling of the health care product in a cost effective manner while maintaining high quality care and contributing to the overall goals of the institution. This is accomplished through the judicious use of resources to control inappropriate inpatient admissions, lengths of stay, and use of ancillary services”. (Utilization Management Review 1983:7).

Utilization management is an integral part of managed healthcare. The most common form of utilization management would be hospital utilization management and pharmaceutical utilization management. In response to the current health care challenges each hospital management and medical staff must make a greater effort to improve the efficiency of their institution while maintaining the level of quality of services rendered.

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<sup>19</sup> Utilization Management in the South African medical environment is explored through question 3.4 of the Interview Framework



For example quality assurance includes the assessment of all activities underway in the hospital, including:

- Utilization Review;
- Quality Control;
- Risk Management;
- Antibiotic Review;
- Infection Control;
- Surgical Case Monitoring;
- Ancillary Service Review;
- Blood Utilization Review;
- Pharmacy and Therapeutic Review.

### *5.3.1 UTILIZATION REVIEW*

Utilization review refers to the process of evaluating the necessity, appropriateness and efficiency of services provided. Information gathered from both the patient and the provider is reviewed for appropriateness and to determine whether it meets established guidelines and criteria (Kongstvedt 1989).

The appropriateness of health care services can be reviewed through prospective, concurrent and retrospective methods (Abrams 1988:27; Kongstvedt 1989).

### ***Prospective***

In this method review occurs before the service is rendered. It generally applies to speciality and hospital services and not to services rendered by general practitioners (primary care services).

### ***Concurrent***

Concurrent review takes place while the service is being rendered and applies only to hospital services.

### ***Retrospective***

In this system review takes place after the service has been rendered. This is the most common method used and may apply to any type of service.

As part of utilization management programmes, significant cost saving can be achieved by using facilities and methods of treatment that are considerably cheaper, and which do not affect the quality of health care. This is particularly important in the control of hospitalisation and drug costs in South Africa. Examples may include the use of:

- Outpatient surgery at day clinic facilities
- Intermediate nursing facilities
- Home health care
- Hospice care
- Drug formularies

- General medicines.

### *5.3.1.1 Utilization review in hospital care*

Utilization review in hospitals is usually by means of prospective, concurrent, retrospective and large case management (Veliotis et al 1993: 46).

Prospective authorisation is commonly referred to as pre-certification. The general practitioner and/or specialist contact the plan before an elective hospitalisation and the plan reviewed the case against defined criteria in order to determine appropriateness. The plan then assigns an authorisation number and can stipulate restrictions such as hospital choice and length of stay. Certain plans may require a second surgical opinion prior to issuing an authorisation number (Kongstvedt 1989; Shouldice 1991).

Concurrent review of care takes place in the hospital and is usually performed by the plan's nurse and the medical director. The responsible nurses will co-ordinate discharge planning and play an active role in gathering information and communicating with doctors and the patient's family (Abrams 1988:27).

Retrospective review in hospitals involves analysing hospital bills and looking at patterns of treatment. The results may be used to preferentially refer cases to hospitals that demonstrate cost-effectiveness and high quality care.

Large case management is a specialist form of utilization review for the management of catastrophic cases (e.g. AIDS, severe head injuries) (Kongstvedt 1989). It usually takes place in cases where hospitalisation has already occurred. Case management focuses on providing necessary services in the most cost-effective setting possible and generally extends and co-ordinates care in the outpatient setting as well (Veliotis et al 1993:47).

#### *5.3.1.2 Practical Implications*

In order to contain costs, utilization review programmes form an important part of managed care systems. If performed correctly and supported with appropriate information, which is considered by all parties to be acceptable and reputable, such measures can promote cost-effective quality health care for the benefit of patients. This overall objective can only be achieved if sophisticated information systems, adapted to the unique health care needs in South Africa, are developed (Veliotis et al 1993:48).

#### *5.3.2 CASE MANAGEMENT*

Case management involves the co-ordination of all aspects of health care where the final account is potentially higher than the average case of its kind (Kongstvedt 1993:501). This activity involves the allocation of a case manager by the relevant medical schemes or managed care organisation to such a case.

The case manager assesses the medical care given to the patient and intervenes in various ways if necessary. These include simple telephonic discussions with the relevant doctors who are involved in the treatments of the patients to ensure that the level of care is appropriate. Unnecessary investigations and treatments are avoided (Kongstvedt 1993:120).

The case manager would also interact with the patient to ensure that the patient does not allow himself/herself to undergo unnecessary treatment and/or investigations. In the case of chronic illness, especially among the elderly, this is a valuable exercise particularly with respect to compliance with prescriptions.

The goal of case management is always to reduce the cost of health care and maintain quality.

### 5.3.3 SUMMARY

The basis of utilization is to enhance the quality of medical care given to patients and helps medical service providers meet the requirement of private insurance companies for receiving payment. Regardless of the type of review programme, all programmes must assure objective considerations of appropriateness of admission, length of stay, and timeliness of professional and ancillary services.

## 5.4 COST CONTAINMENT

The greatest risk faced by a medical aid is that the utilization or cost of treatment will be greater than expected.

Various cost-containment tools are employed by managed care systems to avoid such situations arising. These include:

- Hospital cost containment, such as pre-authorisation of hospital treatment and pre-admission screening (carrying out pre-admission tests such as blood iron level and allergenic tests on an outpatients basis to avoid unnecessary stays in hospital). Re-authorisation is often required where patients are required to stay in hospital for longer than anticipated.
- Case management. The managed care company often becomes actively involved in co-ordinating the requisite services.
- Discharge planning. One of the areas of greatest waste is in the continuing costs of hospital care during recovery. Patients are often kept in intensive-care wards, or hospital for longer than necessary. Discharge planning is an attempt to manage this process.
- Retrospective review. This involves reviewing case treatments to ensure services and medicines billed were actually delivered in

their entirety by following up on cases weeks or even months afterwards.

- Pharmacy Benefit Management (PBM). PBM is an attempt to encourage members and providers to prescribe and use the most cost-effective treatments and medication. This may involve bulk buying and distribution to gain discounted prices.
- Formularies. In some cases managed care companies will only cover for a specified list of medicines - known as a formulary - comprising one or more drugs for each ailment. Criteria for inclusion in formulary are the effectiveness of the drug and the discount negotiated with the manufacturer.
- Drug utilization review. This involves a review by the managed care company of medication scripts for the appropriateness given the ailment of the patient.
- Single exit fees. This is being implemented in South Africa and is an attempt to remove the profit motive for retail pharmacies that earn a dispensing fee rather than profiting on the sale of medicine.
- Member education. This involves preventative care and education in better dietary habits, exercise and lifestyle management with a view to prevent the onset of serious illness later in life.

- Other factors which might contribute somewhat to controlling cost inflation when combined with managed health care are: greater use of appropriate, lower cost personnel; more rational planning to fit each population's health needs (e.g. more outpatient services); limiting malpractice litigation to decrease defensive medical practice.

#### *5.4.1 SHORTCOMINGS OF MANAGED HEALTHCARE IN ACHIEVING COST CONTAINMENT*

There is mixed evidence as to whether managed healthcare plans have led to overall savings in the United States. One recent study suggests that HMO costs to employers contributing on behalf of employees were 14,7 percent less than traditional health insurance, as opposed to 6,1 percent for PPO's and 7,9 percent for POS plans (Erb 1992). Other studies have also suggested that HMO contributions are lower relative to other schemes, although it should be noted that HMO premiums have still risen substantially over time (Gold 1991). There are also indications that traditional insurance plans tended to cater for larger numbers of higher risk, which would artificially inflate costs relative to other options. On the other hand, savings may be underestimated as HMO coverage is usually more comprehensive than traditional insurance and out-of-pocket expenses are generally a lot lower (Ingelhart 1992).

There is evidence that these savings may generally reflect a once-off cost saving due to reduction in hospitalisation rates and length of stay. There



has been no reduction in the longer-term rate of growth of health costs under managed healthcare.

The key factor fuelling health care cost inflation has been identified as technological advance (Newhouse 1993; Goldberg and Greenberg 1988) and managed health care per se has done little to control the proliferation and use of expensive new technology. Only when managed healthcare can develop and implement a socially acceptable method for evaluating and controlling use of new clinical technologies can it conquer cost escalation, as other savings are much less significant. The alternative would seem to be government regulation of cost-ineffective technology or imposition of caps on spending (Ingelhart 1992; Robinson 1991; Aaron Schwartz 1990).

Cost “savings” may often simply represent cost shifting to other parts of the health sector with little benefit. Hospital and drug contract discounts favouring HMO's may simply be recouped by suppliers charging other patients or individual providers more.

The shortcomings of managed healthcare in achieving cost containment suggest therefore that ultimately costs may only be contained through rationing. Nevertheless, managed healthcare may still have a role in providing incentive structures and information which encourage doctors to make cost effective decisions in exercising the discretion which they will inevitably need, given the diversity of clinical practice even with rationed resources (Hillman et al 1992).

#### ***5.4.1.1 Administrative costs and requirement***

Managed healthcare requires significant capacity in administration and systems planning. Within each managed healthcare plan it is necessary to draft contracts, administer and monitor claims, establish risk profiles and thus premiums, devise incentive schemes for providers and monitor quality, use patterns and treatment decisions. Thus, considerable expertise in planning, management, administration and information and information systems are needed (HMO Industry Profile 1992).

An alternative study calculated administrative costs of HMO's at 9,4 percent for 1990, a figure comparable to that of other private health insurers (Himmelstein and Woolhandler 1992).<sup>20</sup> This figure contrasted to that of Canada's national health programme which uses only 0,9 percent of funds on administration. The Canadian system involves a single national health insurer (avoiding the need for duplication and local risk profile analysis), uses global budgets for hospitals rather than requiring the monitoring of every item used, and involves minimal need for billing. However, the figures quoted above for both Canada and private United States medical insurers, apparently exclude administrative costs at the level of hospitals and providers surgeries, which are effectively included in staff or group HMO calculations and might significantly influence the comparison.

#### ***5.4.1.2 Duplication of facilities and equipment***

Managed healthcare providers are easiest to establish in urban areas as the density of the population is greater and services can be more centralised. However competition between managed care providers in a given area means that they may have to duplicate services and facilities to be able to offer potential clients a full range of services. Just as expensive “non-medical” signals can be used as indicators of quality in non-price competition for patients, there has been a tendency to provide cost ineffective high technology equipment as a selling point to providers and consumers (Robinson 1991). Quam (1989) suggests that increased competition between managed care providers in the United States has indeed led to significant proliferation and duplication of not only medical facilities, but also administrative and actuarial systems.

A further type of duplication may occur when employers attempt to minimize costs or maximize benefits by changing to a new managed healthcare plan for employee cover. As patients will have to change provider, there may be of duplication investigations and consultation time. The extent of this is uncertain but might be contained if plans voluntarily, or through regulation, have to provide patients information to each other when this occurs.

## **5.5 QUALITY ASSURANCE**

The term "Quality Assurance" refers to a formal set of activities designed to review and affect the quality of services provided. Doctors have a valuable role to play in identifying features which impact on quality and

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<sup>20</sup> As nearly all insurance packages now incorporate managed health care techniques such as utilization review (Inglehart

will be required to participate or appoint representatives in the managed care plans' committee that is responsible for quality assurance programmes. These programmes form a crucial component of managed healthcare and are required to ensure that standards are maintained.

Because of the focus on cost containment in managed healthcare there have been fears that quality of patient care would suffer. Federal legislation in the United States of America requires managed healthcare plans to actively monitor and maintain quality.

Although quality assurance and utilization review is closely associated, there are distinct differences. If utilization management is too tight, quality of care may suffer (Shouldice 1991). The focus therefore differs: utilization review ensures the appropriate and controlled utilization of medical resources whereas the focus of quality assurance is to ensure that the quality of care delivered is high. In order to achieve these objectives, these two interrelated issues should be separated. It is vital for managed care plans with utilization review programmes, also to have quality assurance programmes in order to prevent deterioration in quality (Shouldice 1991).

#### *5.5.1 TREATMENT GUIDELINES*

Guidelines are written statements that have been systematically developed. They provide practitioners and patients with the means to

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1992), their administrative costs may be higher than traditional fee-for-service insurance arrangements.

make educated decisions regarding appropriate health care (Bernstein et al 1993:197; Burroughs 1994:74; Applegeet 1993:587) .

The purpose of guidelines is to encourage the physician to make a scientific diagnosis based on valid research. The physician is then able to design a treatment plan based on the patient's need rather than on the physician's personal preference. As a result physicians will operate in a manner that allows for minimum deviation from the expected protocol (Tingley 1993:332).

At best, guidelines are crystallisations of the best medical information available (Bergman 1994:70-1). The main aim of providing guidelines is to educate the provider of health care in order to keep up-to-date with excellent health care practice (Onion & Walley 1995:3). They aim at improving the quality and efficacy of health care (Appelgeet 1993: 587).

On the other hand, sceptics refer to guidelines as "cookbook medicine". They maintain that the individual is ignored given that the variation in conditions from one individual to the next is not taken into consideration. In addition the physician believes that his/her autonomy as a doctor is threatened and that medical judgement is curtailed (Bergman 1994:73; Onion & Walley 1995:3).

On the contrary, there are those who argue that guidelines are designed to support medical decision making (Bergman 1994:74).

### *Advantages and limitations of guidelines*

Guidelines are useful with respect to the following (Onion & Walley 1995:4; Davidoff et al 1995:442; Bernstein et al 1993:197; Tingley 1993: 331; Meeker 1992:790-1):

- Keeping up-to-date with the latest medical information, keeping at the forefront of technological advances;
- Standardizing medical practice;
- Minimizing variance from one health practitioner to another;
- They form a baseline of practice from which the various doctors can work and at the same time standardise their practice;
- When kept up-to-date, guidelines minimise obsolete practice;
- Guidelines are essential for effective utilization review. Utilization is measured against the guidelines to establish if the service concerned was utilised within reason. For example, a patient may have a prescription for two diuretics in the treatment of hypertension where the guidelines recommend a second line medication such as an ACE inhibitor to be more effective. By using the guidelines the reviewer is able to make the decision that a less cost-effective treatment is being used than the one found in guidelines;

- Reducing the incidence of inappropriate care, with the guideline forming the benchmark;
- Supporting the physician in a court of law, by supporting the physician's decisions;
- Reducing the cost of health care by (1) decreasing quantity and variety; (2) increasing cost-effectiveness, and (3) assuring the appropriateness of health care.

Although guidelines appear to be advantageous given the above list, they do have limitations. The limitations are as follows (Onion & Walley 1995: 4; Bernstein et al 1993:197; Tingley 1993: 333; Richardson 1994:25-28; Meeker 1992:790):

- Absolute conformity to a set of guidelines prevents the doctor from treating the patient appropriately when required treatment varies from the guidelines;
- Innovation and research are inhibited in the presence of restrictive guidelines;
- Clinical guidelines may threaten the autonomy of the practitioner – the utilization reviewer may hold the doctor to a treatment specified in the guidelines where the doctor should be the one responsible for the treatment decisions;

- Guidelines empower the negligent doctor to abdicate for the care of his/her patient, especially in terms of malpractice. Using guidelines as an excuse for poor health care decisions;
- Any guidelines, developed by the health insurer, are met with scepticism by the practitioner given the motivation for cost reduction;
- There is the risk of inappropriate use of guidelines by managed care organisations, in zeal to reduce costs. The physician's medical decision may become tainted by economic consideration.

The effectiveness of guidelines is a hotly debated issue. There appears to be some consensus that the guidelines are worthwhile but providers of health care use them inconsistently (Schevellis v Eijk, vd Lisdonk, vd Velden & v Weel 1994 :257). Compliance can be achieved by means of careful follow-up and in some cases, denial of cover for care (Lobash & Hammond 1994:787).

The South African environment is able to accommodate such guidelines in their most benign form. Providing the physicians with continuing medical education incorporating guidelines is currently the level of enforcement of the use of these guidelines in South Africa, says Coetzer (1996) at a conference presentation.

In summary, guidelines are:



- Recommendations of clinical treatment modalities;
- Designed to assist the health care practitioner in providing cost-effective health care;
- In danger of limiting the scope of health care provision and threatening the autonomy of the practitioner, and,
- Are available in a variety of forms, for example, algorithms and practice parameters.

## **5.6 MANAGED CARE MODELS**

There are currently a wide variety of networks operating in South Africa. They include Independent Practitioner Associations (IPA), Preferred Provider Organisations (PPO), Exclusive Provider Organisations (EPO), Point of Service arrangement and Health Maintenance Organisations (HMO).

### *5.6.1 INDEPENDENT PRACTITIONERS ASSOCIATIONS (IPA)*

This system is also known as an individual practice association. The HMO contracts with an independent practice association to provide health care services in return for a negotiated fee. The negotiated rate may include all or some of the costs of general practitioner services, specialist referrals, hospitalisation and ancillary services.

The IPA in turn contract with doctors who continue in their existing individual or group practices. They continue to see non-HMO patients, and maintain their own offices, medical records and support staff. The

IPA may compensate participating doctors on a per capita fee schedule or on a fee-for-service basis (Veliotes et al 1993:58).

Generally, all doctors who meet predetermined credential criteria can participate in the entity. IPA's provide a broad choice of participating doctors and they create an organised forum for providers to negotiate as a group with the HMO. However, providers maintain the right to negotiate directly and contract with other managed care plans and to accept private patients (Managed Care Information, Definitions and Contract Considerations 1993:274); Sunshine & Evens 1994: 768; Gorey 1994:24-7).

Independent Practitioners Associations have been the fastest growing type of HMO in the US over the last decade (Inglehart 1992).

#### *5.6.2 PREFERRED PROVIDER ORGANISATIONS (PPO)*

PPOs are another type of managed care organisation in which a network of preferred providers is established to provide health services (Ceslowitz 1993:360). According to Ceslowitz (1993:361) discounts are negotiated with the provider, for example 35 percent discount from pharmacists, in exchange for the channelling of clients to the network. The patients receive financial incentives for using the preferred provider, for example, a co-payment such as a levy on the cost of medicines may be waived. PPO are networks of doctors (and other providers) who provide services at low costs to managed health care schemes through,

for example, discounted fee-for-service or capitation rates. Members are offered broader and cheaper cover if they consult doctors on the scheme's list but are not excluded from using other providers if they so wish. Management monitoring of utilization and quality is used to promote cost effectiveness as PPO providers have little incentive to do this, especially where payment is on a fee-for-service basis.

### *5.6.3 EXCLUSIVE PROVIDER ORGANISATIONS*

An Exclusive Provider Organisation is similar to a Preferred Provider Organisation just that members may only use the funders' predetermined network if they want the third party payer to pay the account for the rendered service. Should they elect to see other providers they are responsible for the full cost (Managed Care Information, Definitions and Contract Considerations 1993: 273). A South African example of this is the Mines Benefit Society. All expenses are covered as long as the member uses the network. Any care rendered by a non-network provider is for the patient's account.

### *5.6.4 POINT OF SERVICE ARRANGEMENT*

In contrast, the Point of Service arrangement is the loosest type of network. The choice of provider is not limited. A third party payer attached to this type of arrangement frequently requires a co-payment from the member for services rendered. If the member uses a provider from the network the co-payment is reduced or even waived (Managed Care Information, Definitions and Contract Considerations 1993: 273).

*5.6.5 HEALTH MAINTENANCE ORGANISATION (HMO): STAFF MODEL  
AND GROUP MODEL*

Health Maintenance Organisations (HMO) is the best-known model in the United States where managed health is more broadly applied (Gore 1993:300). An HMO is an arrangement between health fund administrators and providers of health care for the purpose of delivering health services to an enrolled population for a prepaid fee (Kongstvedt 1989).

By definition a HMO must comprise the following (Veliotis et al 1993:58):

- An organised system to ensure the provision of health cares in a specific geographic area;
- An agreed set of basic and supplemental health services;
- Voluntary enrolment of a group of people;
- A financial plan to underwrite the costs of the services provided;
- A management organisation to manage the affairs of the HMO.

In group or staff model HMOs, a group of doctors contract to provide a package of services to a defined membership. A group of doctors (and allied medical staff) establish themselves as a legal entity and practice under one roof, thereby cutting overhead costs. Examples of staff model HMOs would include Kaiser Permanente in the United States of America and Vaalmed in South Africa.

They then contract with managed health care schemes to provide health services to members at a given per capita rate, for a standard retainer fee or negotiated fee-for-service rate. Doctors have to take costs into consideration in all treatment decisions because of the limits imposed by the payment schedules arranged with financiers, but in other respects have considerable freedom in medical decision making.

## **5.7 REMUNERATION SYSTEM<sup>21</sup>**

Risk is an intrinsic factor associated with the provision and financing of health care. The fundamental relationship between risk and reimbursement is that the higher the risk, the higher the compensation. Conversely, the lower the risk, the lower the compensation. The method of payment of health care providers determined the degree of risk assumed by them (Boland 1991). It is therefore important to identify the various payment methods that may be used by managed care organisations.

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<sup>21</sup> Remuneration models prevalent in the South African Medical aid environment are explored in question 2.4.2. of the interview Framework

Managed care plans utilising remuneration methods such as capitation, fixed fees and withholds will effectively shift certain, or in some cases all, the financial risk away from the payers of health care onto the providers. It is important that risk should not be passed onto the patients (MASA 1992).

There are broadly six types of payment systems. The risk profile of each payment method is different and various combinations of these basic models may be used (Kongsveldt 1989), or combinations thereof (Financial Mail July 1997: 6):

- *Fee-For-Service (FFS)*: This is the traditional system for payment, which remunerates service providers for each unit of service provided. This is the method currently used by medical aid schemes in South Africa. Costs for each unit are usually calculated according to a fee schedule. In South Africa the fee schedule could be MASA fees, Scale of Benefits, or negotiated fee schedule (Veliotis et al 1993:39).

Managed care companies have moved away from this system of payment, as it transfers none of the risks to the providers. In new, or emerging markets, however, managed care companies might be prepared to contract with service providers on this basis while they gather information on the health profile of the patients base or the treatment patterns of the providers.

- *Discounted fee-for-service:* It is common to have discounted fee charged in a negotiated fee schedule. The Representative Association of Medical Schemes (RAMS) recommended Scale of Benefits currently in operation is an example of the discounted fee-for-service. This is where providers agree to discount their services in return for guaranteed or accelerated payments.
- *Global fees:* These are similar to the FFS system with the difference that a single fee would be paid for an entire procedure. For example, a single fee would be paid for a triple bypass operation, covering the cost of accommodation, the cost of the surgeon, anaesthetist, pathology work and all post-operative medication and care. In this case, the hospital bears the cost risk. As a result there is a temptation to under-service the patients.
- *Per diem rates:* This is a set payment per day in hospital, regardless of the services rendered or actual costs incurred (modified in exceptional cases such as when a patient is in Intensive Care). The range of allowable services is included in contracts between the providers and funders, and generally excludes specialists' fees. While this system overcomes the incentive to under-service there is a financial incentive to increase the time spent by patients in hospital. For this reason per diem rates are not common in South Africa.
- *Diagnosis-related groups:* This is where a single fee is paid to a hospital for all treatments related to a particular diagnosis and a

single episode of care, regardless of duration of stay. For example a fixed fee of R10 000 may be paid for the entire fees of a patient admitted after suffering a heart attack. Specialist rates can also be determined for certain categories of procedure (e.g. coronary, artery bypass surgery, and tonsillectomy). While this system is effective in controlling costs in a single episode of care, it does not protect the funder from the costs of further care which may be required.

- *Capitation:* Capitation fees are fixed fees paid to the provider per member per month, regardless of the service required by the patient. General practitioners may receive a fixed monthly payment for every plan member that they contract to see. In return for this payment, however, the managed care organisation may require that these doctors be responsible for all general practitioner consultations as well as for costs of medicines, specialist care and hospitalisation, or any combination thereof.

When providers assume responsibility for large, uncontrollable costs the question of financial risk becomes a major issue and must be clearly understood by the doctor.

Capitation payment methods effectively place the health care provider at risk for medical expenses and utilization. Caution should therefore be exercised before accepting capitation payment systems, especially if the risk for the various parties has not been



clearly defined. Other problems associated with capitation-based systems include (Veliotis et al 1993:39):

- Since capitation is statistically based, it is not sensitive to small enrolments and therefore it may not be possible to spread risk adequately. For example, if doctors or group practices are responsible for the full comprehensive service and there are insufficient members in the risk pool, seriously ill cases may deplete the whole capitation fund and doctors may be liable for an unlimited amount that may be incurred in the specified time period.
- There are often no disincentives for members to utilise services supplied for contracted providers. This may result in an excess demand for services by members.
- There are natural incentives for doctors to reduce the amount of services rendered. Doctors who accept both FFS and prepaid patients may be inclined to differentiate between these two groups, and prepaid patients may receive sub-optimal care.

The introduction of capitation products depends on a reliable database of patient histories and claims patterns. Few organisations have this type of information. The front runner in capitated products has been Medimo (a joint venture between Afrox Health and Medi-Clinic) but actuarial

miscalculations resulted in Medimo assuming losses and withdrawing its capitation products from the market.

The greater the risk borne by the provider, the greater the incentives to under-service, and extensive quality control is required to ensure this does not occur. Capitation fees are often risk-adjusted to reflect the demographics of the patient base and its expected health care utilization (for example, fees may be adjusted upwards for elderly patients). This is common in South Africa where many doctors working for mining companies, for example, are paid a salary.

Research in 1994 by American based Interstudy found that 69,3 percent of health maintenance organisations were using capitation as a reimbursement method for primary health care, 30,2 percent for speciality care (rather than fee-for-service) and 18 percent for hospital care (rather than fixed cost per diem rates), (Financial Mail July 1997:8).

Providers may be remunerated through a combination of various systems. It is common for managed care companies, which act as intermediaries between service providers and funders, to be remunerated on a capitation basis and then remunerate the providers on a discounted fee-for-service basis. It is also common for Independent Practitioners Associations to be remunerated on a capitation basis and for the individual doctors to be remunerated on a proportion of their actual billing.

One managed care company in the Far East remunerates doctors on a "wellness capitation fee". Under this system, doctors are paid a fixed fee per patient for each day that the patient is well. Payment is made monthly, based on the number of days during the month that the patient is well. The definition of "well" is modified in the case of those suffering from incurable illnesses (Financial Mail July 1997:4).

Doctors therefore have a strong incentive to get it right the first time and shift the emphasis from curative to preventative medicine. The patient is deemed to be sick on any day he visits the doctors and until such time as he reports directly to the managed care company that he is well.

One criticism of the Far East model is that doctors may be tempted into short, quick fix cures rather than long-term programmes aimed at addressing the patient holistically. Experience shows, however, that this seldom occurs - according to a report on managed care by Hollandia Reinsurance. Another criticism is that the system is administratively burdensome.

## **5.8 FORMULARIES**

An important tool for cost-effective prescribing is a drug formulary. This is a concatenated list of essential drugs that is used to narrow the margin of choice when prescribing, and therefore reducing the overall cost of prescriptions (Mcgahan 1994:120). The list is comprehensive and dynamic; it is not an unusable document that in cast is stone for

generations. It is aimed at promoting doctors to prescribe in a cost-effective manner (Kongstvedt 1993:152).

Not only does retrospective drug utilization review provide guidelines and insight for prospective drug utilization review, it also assists in the design of drug formularies. There are four types of formularies, ranging from an open one to a very tightly managed one, where reimbursement is made only for the medicines on the list (Guiquinta 1994 :31).

The four types of formularies are (Guiquinta 1994 :31) :

- *Open*: This is a guide to recommended medicines.
- *Closed/restricted*: Compulsory use of the medicines on the list is the only way to be reimbursed for the cost of the medicines. An example of this is the Essential Drug List that has been released for the public health sector in South Africa.
- *Incentive-based formulary*: In this case there is a free choice of drugs but the medicines off the list are more costly for the payer. Alternatively there may be co-payment for the patient on drugs that are not on the list.
- *Patient-driven formulary*: This is a list of drugs that may be prescribed according to the patient's medicine benefit. In this way the patient presents the doctor with a list of, for example, medicines for epilepsy and anxiolytics that are not on the list.

## 5.9 SHORTFALLS OF MANAGED HEALTH CARE

Managed health care has been criticised for creating incentives not only to avoid over-treatment but to under-treat and reduce the quality of care (Bergman 1994:73; Onion & Walley 1995:3). Furthermore, whereas patients have unlimited choice of provider under conventional medical aid cover, they may have limited choice of provider under managed health care plans. This may mean that patients cannot use the most geographically accessible medical service or those, which the patients feel provide the best quality care.

From a patient's point of view, this is the chief concern. In the long – term, however, if the patient is dissatisfied with all of the doctors available or with any particular doctor the patients could change managed care provider or choose not to join a managed care unit and continue on the medical aid system. There is therefore an incentive for the managed care company to improve its quality of care and provider-patient relationships so that they recruit more members and therefore increase their income. Their restricted choice must also be seen against the restricted choice, which would arise if private care becomes unaffordable for the patient.

A further criticism of managed healthcare comes from the doctors. Doctors have jealously guarded their clinical independence and do not take kindly to the thought of having health service managers who may or may not be medically qualified, interfering with their choices of

treatment. However, it should be pointed out that this is not as bad as doctors often portray. In the public sector at present, many decisions that affect patient treatment are made by health service managers together with senior consultants for example, what drugs will be available in the public sector hospitals and therefore may be prescribed, treatment guidelines in public hospitals etc.. There are numerous examples from other parts of the world of how HMO managers have developed appropriate working relationships with the doctors they employ. Rather than a threat, the establishment of HMO's should be seen as an opportunity by health professionals to rationalise their provision of healthcare, to introduce peer auditing, to establish more cost effective health practices and to become part of a team (Price 1992).

#### **5.10 EXPERIENCES IN THE UNITED STATES**

Most empirical evidence was derived from experience of the managed healthcare industry in the United States, where, managed healthcare has proved to be a feasible, if not particularly satisfactory, approach to private sector financial difficulties.. Over 160 million Americans are enrolled in a managed care of some form today (Online Forum 1998).

Managed healthcare began in the United States in 1923 – but it only really started making an impact in the 1970s (Sunday Times 1998:1). Since managed healthcare became prominent in the very early 1980s, it has increasingly penetrated the market. The proportion of insured Americans covered by managed health care plans increased from 27

percent in 1987 to 49 percent in 1990, while 95 percent of American employees' health benefit plans incorporate features of managed care (Ingelhart 1992:742). More recent figures show that 85 percent of all individuals in the United States of America are covered by managed healthcare, without the balance of 15 percent on fee-for-service indemnity type products (Sunday Times Business Times 1998:1).

“ A managed care “take-over” will occur between 1996 and 2000” (Coile RC 1995: 60). At the beginning of 1995 every state except Alaska and Wyoming had at least one HMO. Highlights of the dramatic transformation to managed health care include:

- Two out of three insured Americans are now enrolled in HMOs and managed care plans, according to a study by KPMG Peat Marwick of companies with more than 200 employees (Veliotis et al 1993)
- Three-fourths of all physicians have contracts with HMOs and managed care plans, and 89 percent of physicians employed in group practices are working under managed care agreements (Eckholm 1994:5).

Further, forecasts have it that government health care programmes will be rapidly converted into HMOs within the next five years. Medicare and Medicaid will be market targets for HMO enrolment. Already HMO enrolment for Medicaid recipients increased by 63 percent in 1994, according to the United States Department of Health and Human Services (Coile 1995). It is interesting to note that more than 50 percent

of the increase in Medicaid HMO enrolment is due to state legislated health reform initiatives.

Evidence derived from American experience highlight some of the major benefits and problems associated with managed care. However we should be cautious about the degree to which United States experience is applicable in South Africa as the nature of the economy and society differ in important respects. For this reason local institutions are “Africanising” the American concept to deal with the lack of historic medical data in South Africa, demographics and geographies.

In the United States the overall measurable success of managed health care is proven by an increase in health costs consistently below the national inflation index.

#### **5.11 MANAGED CARE IN THE SOUTH AFRICAN CONTEXT**

The Commission of Inquiry, which was appointed by the State President in 1993, submitted a comprehensive report, the Melamet Report, with findings and recommendations to the Minister of Health during April 1994. One of the recommendations was that medical schemes should report on developments regarding managed care and that the Council for Medical Schemes should encourage the wider application of managed care.

In the Registrar of Medical Schemes' annual report ending 31 December 1994 various schemes reported positively on results in pursuance of



utilization and performance profiling programmes with remarkable cost savings.

It is evident from available figures that medical benefit schemes, by way of managing health care and the rendering of services to their members by means of their own facilities, contained costs effectively. Considerable savings have also been reported by schemes managing their own pharmacies. The absence of the profit motive, together with successful negotiations regarding prices and effective purchasing, contributed most to savings.

#### *5.11.1 COST SAVINGS*

Managed health care has shown potential to provide cost savings in certain situations. Comparison of a staff model type HMO and medical aid schemes in South Africa has shown that utilization of doctors, investigations and hospitalisation was markedly lower in the former (Broomberg and Price 1990).

Two particular areas may yield cost savings through managed health care:

Firstly, there would seem to be great scope for control of hospital costs. Berman (1993) reports that inpatients per 1000 members' stand at 316 for United States HMO's, 499 for United States indemnity insurance and 732 for South Africa private care. Furthermore actual hospital cost per day in HMO owned facilities stands at R373 compared to R600 - 900 in

the private medical aid sector. A further cause for concern is the ability of South Africa doctors to hold shares in hospitals to which they refer patients. This creates incentives, which would encourage, rather than decrease, use of hospitals. In the United States, ownership of shares in facilities, which could lead, to “self-referral” is prohibited.<sup>22</sup>

Secondly, savings on pharmaceutical costs through formularies and rigorous generic drug substitution may be large. Drug costs accounted for 27 percent of medical scheme spending in 1992 as opposed to 8 percent in the USA where insurers only pay for generic drugs, when they are available (Cowlon 1993). Further more, rising drug costs (29,7 percent for 1991 -1992) have been a major source of medical cost inflation (Steyn 1993).

The type of HMOs and provider payment mechanisms, which emerge, may well influence managed health care ability to control costs. Group and staff model HMOs, with capitation payment, seem most cost effective. IPAs tend to be less successful at cost control irrespective of whether management is mainly done by peers or insurance company managers, who are perhaps more focused on cost containment. This might be because they tend to be FFS (Enthoven and Kronik 1989) which makes them less capable of influencing doctors’ practice patterns.

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<sup>22</sup> Ownership of shares in hospitals by doctors would seem to be problematic only if hospitals are funded on a fee-for-service basis. if hospitals have fixed budgets or are paid, for example, on a diagnostic Related Group (DRG) basis, provider’s incentives would be reversed and share ownership by referring doctors might improve cost effectiveness, as their profits would rise through reducing unnecessarily expensive treatment.

In South Africa, group and staff model HMOs, on the whole, faced greater resistance from providers and consumers. FFS-IPAs have been the fastest growing type in the United States in the 1980s and seem to be the most prevalent in South Africa. This would suggest that the scale of savings in South Africa will be limited. IPAs may however be the most feasible way to acclimatise South Africa doctors and patients to managed health care practices. Once this has happened more cost effective models of managed health care might have a better chance of acceptance, if cost pressures remain unresolved. In the United States for example, a trend away from FFS for primary physicians by the early 1990s were noted (Gold 1991). IPAs may also have the benefit of avoiding significant capital and population distribution constraints in a South African context. Overall, it is likely that introduction of managed health care in South Africa will have to be an evolutionary process, adapted to particular political-economic and demographic circumstances.

#### *5.11.2 PROBLEMS IN IMPLEMENTATION IN SOUTH AFRICA*

Evidence derived from American experience can highlight some of the major benefits and problems associated with managed care. However we should be cautious about the degree to which United States experience is applicable to South Africa as the nature of the economy and society differ in important respects. Some of the specific problems, which may be encountered in South Africa, will be discussed below.

##### *5.11.2.1 Administrative costs and capacity*

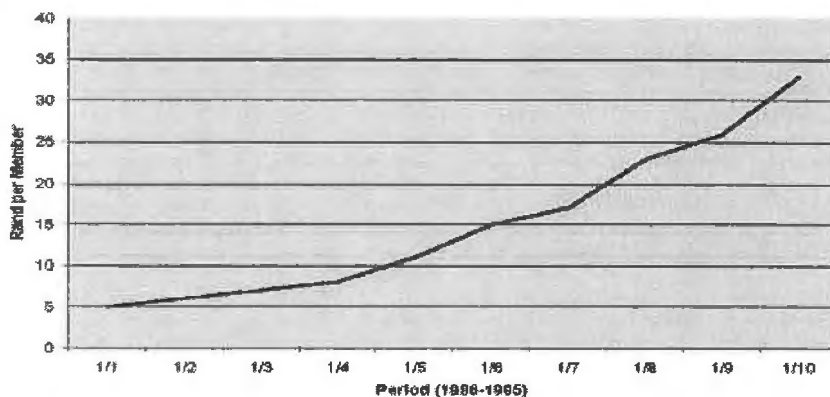
Administrative costs of HMOs reported in the United States (9,4 percent - 13 percent) seems more expensive than in current SA medical schemes which over the past decade, never spent more than 7,2 percent of subscriptions on administration. While international comparisons are difficult to interpret<sup>23</sup>, whether managed health care is of net benefit will depend more on whether any new administrative costs can create larger savings in other areas. Already we have seen a

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<sup>23</sup> In particular it should be noted that medical aid figures exclude administrative costs of private hospitals and doctors in, for example, billing, pursuing accounts and bad debt. These are generally included in managed health care administrative cost data. Direct comparisons between figures for US managed health care organisations and medical aids are therefore likely to be biased in favour of the latter.

large increase in administration costs not directly associated with a concomitant increase in cost savings.

**Graph 5.1 Medical Aid Administration cost per member**



Source: Registrar of Medical Schemes

Perhaps of more concern is whether the private sector in South Africa has access to a large enough pool of administrative capacity (managers, accountants, and computer systems). United States experience indicates that among the most common problems to be expected with managed health care plans are: incorrect pricing, poor budgeting, rapid expansion, poor financial recording and inadequate cost control. While there does seem to be some available private health sector expertise and computer facilities, if this is inadequate, not only might managed health care fail to control costs and maintain quality but plans may become insolvent with subsequent disruption of services. Furthermore, skilled personnel may be drawn in from other areas of the economy where they are needed. The situation will need to be monitored to identify and control these types of problems if they emerge.

At the level of individual practices, particularly those with high patient volumes, it is possible that the introduction of managed health care may impose significant extra administrative burdens on practitioners. This could occur particularly when practitioners have to contend with a large variety of different systems used by different funders. Managed health care plans will have to be sensitive to the need to limit inconvenience to practitioners and avoid unnecessary time consuming systems if they are to optimise cost effectiveness and acceptance by providers.

There is concern that deregulation of scheme plans may lead to proliferation of benefit packages requiring investment in aggressive marketing by schemes and thus inflated costs. Diversity of plans could also make marketing more complex, adding to “the risk of disinformation and misrepresentation” (Magannis (1) 1993). However regulating of marketing (e.g. prohibiting use of brokers by health insurers and plans) may be able to contain these problems.

The relatively small population served by private health services in South Africa has been argued to be a constraint on potential benefits of managed health care.

Each HMO has been calculated to require a minimum membership of 25000 in a defined geographical area (Tollman et al 1990). While there are indications that small United States HMOs may be less viable than large, in 1990 39 percent of HMOs (including IPSs) in the US had fewer than 20 000 enrolled (Gold 1991). Thus although it can be argued that

population constraints might limit the application of some HMO models in South Africa, particularly in rural areas, the possibility that versions of IPA or PPO-type plans may be feasible is not ruled out. In addition, the vast majority of consumers of private medical care in South Africa live in urban areas, so private managed health care plans are less likely to be hindered by this consideration.

#### ***5.11.2.2 Lack of competition***

Related to the issue of the size of South African markets is the question of whether it can sustain enough plans for competition between managed health care schemes. Competition between plans to attract more members through lower contribution rates is seen by many as key to the success of managed health care cost control and is central to the idea of managed competition. Even if no direct competition is possible however, “yardstick competition” enforced by regulators or funders might be feasible. “Yardstick competition” involves comparing the costs of similar schemes in different areas and requiring that costs be reduced to those of the most cost-effective performer.

#### ***5.11.2.3 Quality control***

The medical profession has frequently voiced concerns that managed health care focuses on cost containment and given providers incentives to under-service and delay treatment, with possible reduction in service

quality. There is, however, no clear evidence of this in the United States (Tollman 1990).

#### **5.11.2.4 Curative bias**

Theory suggests that benefits of preventative care for future curative cost control will make managed health care plans promote preventative care strongly. However Tollman et al (1990) point out that the major thrust of managed health care practice, has been reduced to curative care expenses. There can be no presumption that curative care will be more expensive to a particular scheme than preventative care, particularly in the short-term. Evidence of neglect of preventative care has for example been seen in Brazil where HMOs have referred clients to the public health system for immunisation rather than providing for it themselves (Lewis and Welch 1987).

This would not however seem to be an intractable problem in South Africa. Regulation could ensure that certain preventative services were included in all plans. Alternatively, in view of the limited access to private care in South Africa, certain public sector preventative programmes (e.g. immunisation) will have to be operated anyway, and it may be most effective to rely on them for provision.

### **5.12 CONCLUSION**

Managed care has its origins in efforts to improve access to healthcare. In general, managed care does a better job than the traditional fee-for-service system in ensuring that consumers get preventative care and in



curbing unnecessary tests and procedures. Managed care also has the potential to co-ordinate care, minimize conflicts between treatments or prescriptions authorized by a patient's various physicians. It is also generally acknowledged that managed care has succeeded in transferring risk back to the provider and in cutting healthcare costs.

Managed care depends, for its success, on gathering data about patients' medical spending patterns, claims history, drug utilization and a host of other information which is proving invaluable in managing risk in health funding. At its core, it places providers at risk for the health of the community.

In countering the negative issue around managed care Gradison, President of Health Insurance Association of America comments (Online 98:2): "Managed care is responsible for an increasing number of health plans having coverage for wellness and prevention programmes. Because of managed care, consumers now have much more information at their disposal, including innovations such as

24-hour toll-free telephone services offering information about coverage and advice about health care. Because of managed care, health plans are now beginning to provide consumers with important quality of care measures, thereby enabling consumers to better compare how well competing health plans perform when delivering care. Also, many consumers use their managed care coverage with a minimum of paperwork and with very little out-of-pocket expense.

In short, managed care has raised the quality of healthcare and has brought about accountability to the nation's health system. It has put brakes on health care cost inflation, which prior to managed care ran anywhere from two to three times the general inflation."

Managed care exists in different forms, with different benefit structures, finance mechanisms, and provider configurations. It is still evolving and therefore very much a work in progress.

The following chapter deals with regulation in health care funding in South Africa and what the pending new regulation might mean for the subject of risk management.

## **CHAPTER 6: DRAFT POLICY :REGULATIONS UNDER THE MEDICAL SCHEMES ACTS, 1998 (ACT NO. 131 OF 1998)**

### **6.0 INTRODUCTION**

The objective of the proposals are by and large to improve the affordability of and access to private health care through medical schemes yet it targets areas which impact directly on the medical funders' ability to manage risks. An important element of these reforms would be to reinforce the requirement of community rating within medical schemes. The core of a community rated system is such that people should not be discriminated against in obtaining medical schemes cover on the basis of their health risks. This goal in itself flies in the face of risk management principles and goals. There has been an outcry from the health insurance industry and this chapter will divulge more of the proposals as well as industry views.

Many of the proposals made are set against the Department of Health's more general policies for the health system as a whole. These include attempts to maximize the effectiveness of the health system in the delivery of services: improve equity in the financing and delivery of health care and promote greater efficiency in the use of resources.

## 6.1 REVIEW OF CURRENT HEALTH ENVIRONMENT

Private sources of funding account for nearly 62 percent of total health expenditure in South Africa and provides care for 23 percent of the population on a regular basis ( McIntyre,, Bloom, Doherty & Brijal 1995:1). Medical schemes are the principal financial intermediaries in the private sector, accounting for almost two-thirds of total private spending on health services. The private health sector is therefore a significant part of the national health system in South Africa. It plays an essential complementary role to the public health system. However, the private health sector faces a number of acute problems and challenges to its long-term sustainability:

- Costs in the private sector, particularly those within medical schemes, have increased more rapidly than the rate of inflation and make up an ever-increasing proportion of the average salary. In 1980 the average contribution was approximately 7 percent of the average salary. By 1996 contributions had spiralled to 17,3 percent ( Draft Policy Document 1997:4).
- The proliferation of non-indemnity medical insurance has led to substantial cream skimming, and many young and healthy members have opted out of traditional medical aid schemes, preferring only to obtain catastrophic health care cover. Thus risk pools of medical schemes have been systematically denuded of the young and healthy members. The impact has been to reduce or eliminate cross-subsidisation within medical schemes. To avert collapse, schemes are forced to charge even higher premiums to those who

remain (especially the old and sickly) at the time when they can hardly afford it. Most of these inevitably fall back onto the public sector.

- Many medical schemes have varying benefit packages, some of which provide inadequate cover. Many people with these unrealistically low options exhaust their medical aid cover very quickly and are transferred to public hospitals, a dumping phenomenon that is increasingly becoming common. Demand pressure is consequently increasing on the public hospital system at a time when there is not adequate capacity to provide for additional people.
- Some schemes have introduced individualised medical savings plans. These plans might encourage people to opt out of insurance type medical schemes thus threatening cross subsidisation. In addition such savings accounts can create perverse incentives that discourage use of preventative health care. They can also create opportunities for tax avoidance. Lastly, low income persons and those who left employment frequently may be grossly underfunded under a savings accounts regime, as they would be able to save less and to meet fewer of their health care needs.

Other challenges within medical schemes relate to inappropriate governance systems and inadequate financial administration of funds of schemes. One further finds that lack of adequate reserve

requirements on medical schemes prejudices the solvency of many medical schemes.

Many medical schemes are also too small. When few people subscribe to a medical aid scheme, the benefits of economies of scale are lost. It also becomes difficult to spread the risk of illness across a larger risk pool.

There have also been a number of cases of fraud reported to the Council for Medical Schemes during the last few years. Such fraudulent behaviour is a major concern and contributes to escalating costs because for every claim made for a non-health benefit or for a non-member or his/her dependent benefit contributions have to increase to ensure that there are sufficient funds to pay for legitimate health care benefits.

## **6.2 COMMUNITY RATING AND OPEN ENROLMENT**

The Department of Health considers that community rating will ensure that cross-subsidisation takes root in medical schemes. Community rating will contribute towards equalising contributions for high and low risk members and will promote greater equity. Although this may involve slightly higher contributions for current younger and healthy members. International and local evidence suggest that overall system costs diminish in high risk-pooled environment (Draft Policy Document 1997:7).

The most important characteristics of the community rated system proposed by the Department would be :

- “Avoidance of the individual’s age, gender, claims patterns experienced and health risk when determining contributions;
- Residual ability to use members' incomes and/or number of dependants for determination of contribution rates;
- Membership of the scheme will define the community for the purposes of determining contributions;

The characteristics of open enrolment includes:

- Anybody must be able to enter a medical scheme if they can afford to pay the average contribution regardless of their health conditions. In this regard open schemes will be required to accept all applicants while employer based schemes may accept any applicant. This provision will however be subject to protections against adverse selection.
- Anybody must be able to stay in a medical scheme, regardless of their health condition” ( Draft Policy Document 1997: 7).

In this system medical schemes will rate the community of members it covers rather than the individual. The consequences of risk rating will be to protect greater cross-subsidisation from the healthy to the sickly.

The Department accepts that adverse selection can result from open enrolment, especially in the case where people join schemes late in life for a limited period and only to obtain benefits ( Draft Policy Document 1997:9). Such opportunistic behaviour can also result in inequitable transfer from long term scheme members to those only joining late in life. There may therefore be strong efficiency and equity arguments for some form of anti-selection mechanism for persons joining for the first time only late in life. The Department considers that such protections should be based on a system of lifetime community rating underpinned by gradual increases in waiting periods to deter late and strategic entry into a medical scheme. Such an approach is preferred internationally <sup>24</sup> as the one that provides incentives for people to join health insurance schemes while still young and healthy and that also protects equity. The Department therefore proposes that various protections be created by limiting certain aspects of open enrolment and that open enrolment be conditional upon the following:

- An applicant must have been a member of another medical scheme immediately prior to applying;

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<sup>24</sup> Ireland, for example, varies qualifying periods for insurance by the age of the applicant. Australia also relies on a system of waiting time and lifetime community rating as the most effective mechanism of deterring late and strategic entry to medical schemes. Draft Policy Document ( 1997:10)



- Where a current member of a scheme wishes to change to another scheme such transfer should not be prevented on the basis of the existence of a pre-existing condition;
  
  - If a person was not a principal or dependant member of a medical scheme immediately prior to applying for membership then the scheme would be permitted to limit that individual's access to the scheme through a system of waiting periods. The draft document released in July 1997 indicated that a maximum of 12 months waiting period could be imposed in this regard, with an option of waiving all or part of the waiting period in return for paying contributions, at an average rate. More recent proposals issued in May 1999 ( Government Gazette No. R. 599 (7)) limited the general waiting period to three months "provided that an applicant may elect to make a payment to the scheme in lieu of the waiting period". Further constrains in the proposals include:
    - A medical scheme may impose a specific waiting period of no more than nine months for any pregnancy-related benefit that is not part of prescribed minimum benefits.
    - A general waiting period may not be imposed on any applicant if, at the date of application, he or she had been a member or a dependant of a member of another medical scheme for a continuous period of two years or more.
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Such a system of waiting periods may well be the most effective interim way of containing the worst aspects of adverse selection, while ensuring that equity goals of government;

- Pre-existing sickness conditions: A medical scheme may require an applicant to provide the scheme with a medical report on any condition for which medical advice, diagnosis, care or treatment was recommended or received within the six months period ending on the date on which an application was made (Government Gazette No. R599 (8)):
  - Where a pre-existing condition exists in an applicant, schemes may impose a condition-specific waiting period for not more than twelve months from the effective date of coverage: Provided that:
    - No waiting period may be applied to any treatment or diagnostic procedures covered within the prescribed minimum benefits;
    - No exclusion may be applied to any person who, at the time of application, had been a member or a dependant of a member of another medical scheme for a continuous period of at least two years, and who changes to a new scheme because of a change in employment and applies for membership within three months of the termination of membership from the other medical scheme.

- Amnesty Period prior to introduction of later joiner penalties: For a period of six calendar months following the effective date of these regulations, (i.e. from 1 January 2000 until 30 June 2000 inclusive) medical schemes must accept persons meeting the definition of a late joiner and applying for cover without imposing any of the late joiner penalties described above.

### **6.3 DEMARCATION BETWEEN BUSINESS OF MEDICAL SCHEMES AND COMMERCIAL INSURANCE**

A further proposal is to effect proper demarcation between the business of medical schemes and that of commercial insurance. This has arisen as a result of risk rated non-indemnity insurance products been able to “cherry-pick” and attract the younger and generally healthy members out of schemes leaving the sickly and elderly behind. Many medical aids have been forced either to increase their contribution rates or adopt similar strategic behaviour and discriminate between the classes of risk. The result has been that many high-risk individuals have lost cover. Many expert opinions<sup>25</sup> have argued that such strategic “cream-skimming” can only be effectively attenuated within the ambit of a single act. It has been argued that such consistent regulation will level the playing fields between medical schemes and commercial health insurance and that it will lead to the stabilisation of medical schemes risk pools. There has nonetheless been some

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<sup>25</sup> Such as South African Chamber of Business comments on the draft discussion document pertaining to the financing of the private health industry in South Africa SACOB 1997.

resistance to the notion of making all health product register under a single Act in some submissions. While the Department remains firmly committed to the ultimate consolidation of all Act governing private health care financing, this issue cannot be resolved in the short term

The Department therefore proposes that the integrity of the community rated medical schemes environment be protected through proper demarcation of the dividing line between medical schemes and commercial health insurance policies as defined within the proposed insurance bills <sup>26</sup>. Such demarcation should be effected through a redefinition of business of a medical scheme within the Medical Schemes Act. Any person who operates any entity with the object of a medical scheme should be required to comply with the Act.

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<sup>26</sup> Short-Term Insurance Bill and Long-Term Insurance Bill Department of Finance 1997.

### 6.3.1 PROPOSED CHANGES

With reference to Chapter 3 and the current definition of a medical aid, the following change has been proposed:

“medical scheme” means any organisation, institution, fund , plan, arrangement, agreement or insurance policy established with the object of enrolling members and making provisions for :

(a) the obtaining by members thereof and by dependants of such members of any service;

(b) the granting of assistance to members thereof in defraying expenditure incurred by them in connection with the rendering of any service; or

(c) the rendering of a service to members thereof or to dependants of such members either by the scheme itself or by any supplier of a service or group of suppliers of a service in association with or in terms of an agreement with the scheme.

It is proposed that the term “service” be altered to “health care service” with the current definition of service applied to “ health care service”. The intention is to make clear the nature of services covered. In addition it is proposed that forms of health cover such as Benefit Funds, Friendly Societies, Exempted Schemes, and other schemes that

engage in the business of a medical scheme should also be required to register in terms of the medical Schemes Act.

The intention of these alterations is to ensure that all forms of health cover, which have the object of a medical scheme, are registerable in terms of the Act. This is based on the premise that it would be the only way of adequately protecting the public and of ensuring the establishment and maintenance of viable pools, and thereby ensuring that proper community rating exists with cross-subsidisation, where the healthy and the young help to subsidise the sick and the elderly.

#### **6.4 MEDICAL SAVINGS ACCOUNTS**

The Department remains “unconvinced” about the value of savings accounts in containing costs in the long-run. Medical costs will begin to decline in a meaningful manner only through adoption of alternative delivery and payment mechanisms that can contain both unit costs and number of episodes of care. However the Department is willing to consider the continued interim existence of savings schemes under the following conditions:

- Only a maximum of 25 percent of annual contribution income can be accumulated into an individualized savings account, the remaining 75 percent should be paid into a pooled fund;

- All services in the proposed prescribed minimum benefits package should form part of the pooled community rated portion of the fund;
- Where withdrawal of benefits occurs, these should be subject to a final withholding tax as proposed by the Katz Commission<sup>27</sup>.

(Refer to Appendix 1 of Chapter 6 for more detail medical savings accounts).

## **6.5 PRESCRIBED MINIMUM BENEFITS**

The section set out the scope, level and operation of the set of prescribed minimum benefits to be available to all members and dependants, as provided for under section 29(1)(o) and 29(1)(p) of the Act. The intention of the regulations in specifying a set of prescribed minimum benefits for hospital care is:-

- To avoid loss of cover in the event of serious illness, and consequent risk of unfunded use of public hospitals; and
- To encourage efficient allocation of private and public health care resources.

Opposition to the concept of prescribed minimum benefits has been based on concerns that such a minimum will make schemes unaffordable and would therefore inhibit growth of private sector coverage.

It is however clear that most schemes will be providing more than the prescribed minimum benefits. The Department considers that the question of co-payment for such ancillary benefits is different from that of prescribed benefits as demand for such services is largely predictable and discretionary. Co-payments for such services would not therefore have adverse equity implications. Hence co-payments will be allowed for additional benefits.

#### **6.6 MULTIPLE BENEFIT OPTIONS WITHIN SCHEMES**

Many medical schemes currently offer a differentiated set of benefits and a system of options within one scheme. Such a system is predicated on the basis that it allows a medical scheme to develop niche products that some members may prefer. Although not in favour of a proliferation of options offered by schemes, the Department has accepted the need for flexibility. However, all options need to include at least the minimum prescribed benefits, no cross-subsidisation is allowed between options, each option has to have at least 2500 members and options created solely for the purpose of hosting defined groups on an exclusive basis may not be registered.

#### **6.7 LIMIT ON TAX DEDUCTIONS**

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<sup>27</sup> Sixth Interim Report of the Commission of Inquiry into aspects of the Tax Structures of South Africa. July 1997.



Other proposals limit the tax deductions for medical aid only to those schemes registered under the Medical Schemes Act and disallow pre-funding of post-retirement medical scheme contributions. The latter proposal is aimed at limiting the individualisation of accumulating funds and “inevitable discrimination of high risks within this environment”.

## **6.8 RESERVE REQUIREMENTS**

Many medical schemes currently operate without provision for adequate reserves. The Department believes that it is financially prudent to keep a level or reserve because premium income may at times not be adequate to cover benefits - because of increases in medical costs and variations in claims. Presently it is merely a recommendation that Medical Schemes maintain accumulated funds equivalent to 25 percent of their annual contribution income. The Council for Medical Schemes has recommended that this requirement be made mandatory (Draft Policy Document 1997:25).

Sufficient reserves are critical to deal with volatility of claims, and 25 percent represent only 3 months of average claims. The Department therefore proposes that new schemes should have business plans that make provision for the required levels of solvency margins before they can be registered. Existing schemes should be given three years in which to comply or face de-registration.

## **6.9 MANAGED HEALTHCARE**

The introduction of managed healthcare in South Africa raises a number of issues including the ability of managed care to contain costs without hurting access and quality of care, the need to ensure solvency of managed care plans; fairness in contracting and the needs to develop appropriate standards for resolution of potential disputes among the contracting parties (Draft Policy Document 1997:29). Some of the proposals made in this document will also apply to managed care organisations. In addition, the Department has established a consultative forum on managed health care in South Africa. Conditions for providing managed healthcare are documented in point 13 of the May 1999 Government Gazette No. R.599 and can be found in Appendix 2 of Chapter 6.

#### **6.10 CONCLUSION**

The reforms proposed in this document have been prompted by concerns over rising costs of private medical cover; increasing cream-skimming by life insurers and the resultant risk rating by medical schemes; and concerns that adequate access to medical schemes cover should be available at prices which do not exclude high risk groups. The Department considers that these problems can best be resolved through a system of lifetime community rating that relies on the application of longer waiting periods for people entering medical schemes only late in life. In addition the Department believes that a prescribed minimum package of benefits will afford members of

schemes meaningful benefits, and limit the tendency to shift costs of some members to the public sector.

Clearly the proposals, if anything widen the already wide disparity in the practice of risk management in the medical funding industry in South Africa versus the theoretical benchmark. In particular, community rating and guaranteed access will undermine the actuarial determination of risk to allow for appropriate premium charges.

In response to the criticism that guaranteed access could result in healthy members deferring membership until late in life, the department proposes a waiting period whereby new members would have to wait up to three months before gaining access to the scheme. Whether this would be sufficient to prevent adverse selection is not certain.

The funding crises facing employers could worsen, should government legislate against screening members based on risk factors such as age, medical history and previous claims patterns.

**APPENDIX 1: GOVERNMENT GAZETTE NO. R. 599. (6).  
PROVISION OF PERSONAL MEDICAL SAVINGS  
ACCOUNTS**

- (1) A medical scheme shall not pay into a members' personal medical savings account an amount that exceed an equivalent of three contribution months during any calendar year.
- (2) Funds deposited into or advanced by a medical scheme into a member's personal medical savings account shall not be used to purchase or reimburse any relevant health service which forms part of the prescribed minimum benefits.
- (3) Funds deposited in a member's medical savings account may not be used to offset contributions.
- (4) The maximum allowable cumulative balance in a member's personal medical savings account shall not be more than three times the annual allowable limit that can be paid into such an account.
- (5) Credit balances in the member's personal medical savings account may be transferred to another scheme with a personal medical savings account regime when such member changes schemes.

(6) Any balance in a members' personal medical savings account shall be excluded from the calculation of the mandatory nett assets of the medical scheme.

(7) Every medical scheme must provide the following to the Registrar with regard to members' personal medical savings accounts

(a) Details of amounts paid into members' personal medical savings accounts;

(b) details of benefits, by category, paid out of members' personal medical savings accounts;

(c) details on both debit and credit balances in members' personal medical savings accounts; and

(d) any other reports that the Council may specify from time to time.

**APPENDIX 2: GOVERNMENT GAZETTE NO. R.599. (13)  
CONDITIONS FOR PROVIDING MANAGED HEALTH CARE**

- (1) If a medical scheme provides benefits to its members by means of a managed health care arrangement or agreement, such arrangement or agreement.
  - (a) must be reduced to writing; and
  - (b) may not absolve a medical scheme from its responsibility towards its members if any person is in default to provide any service in terms of such arrangement or agreement.
- (2) The arrangement or agreement contemplated in sub-regulation (1) must specifically provide that no member or dependant of a member may be held liable to the participating provider for any sums owed by the medical scheme.
- (3) An agreement or arrangement contemplated in sub-regulation (1) must provide that a party to the agreement or arrangement, including a trustee, agent or representative of such party, may not institute any legal action against a member or a dependant of a member to collect sums owed by the medical scheme.
- (4) A provider of managed health care may not, in terms of an arrangement or agreement contemplated in this regulation, or otherwise, assume financial liability for any cover beyond the scope of what such provider is able to provide and such

liability must be clearly defined by means of the arrangement or agreement between the provider and the scheme.

- (5) An agreement or arrangement between a provider of managed healthcare and a medical scheme must require either party to give at least 90 days advance notice before terminating the agreement or arrangement.
- (6) A managed health care organisation shall not in any manner forbid or discourage a participating provider from informing patients of the care they require, including various treatment options, and whether in the provider's view, such care is consistent with medical necessity and medical appropriateness.
- (7) A provider shall not be prohibited from protesting or expressing disagreement with a medical decision, medical policy or medical practice of the managed health care organisation, within the constraints of the professional practice and ethical guidelines for the profession.
- (8) A managed health care organisation shall not terminate the contract with a provider because
  - (a) the provider expresses disagreement with the organisation's decision to deny or limit benefits to a member
  - (b) the provider assists the member to seek reconsideration of the organisation's decision; or

- (c) a provider discusses with a member any aspect of the member's medical condition, any proposed treatment or treatment alternatives, whether covered by the managed health care organisation or not.
- (9) Nothing in this regulation shall be construed to prohibit a managed health care organisation from
- (a) requiring of a provider to refrain from making, publishing, aiding or disseminating, directly or indirectly, any oral or written statement or any pamphlet or circular that is false or maliciously critical of the managed health care organisation and is calculated to injure or prejudice such managed health care organisation; and
  - (b) terminating a contract with a provider because such provider materially misrepresents the provisions, terms and requirements of the managed health care organisation.
- (10) A managed health care organisation that endeavours to procure a network of providers must
- (a) upon request, provide an application and information required for consideration for participation in the organisation's network, to any provider wishing to apply for participation in the organisation's network;and
  - (b) make publicly available its application requirements.



- (11) A managed care organisation may not deny an applicant participation, or terminate participation on its network on the basis of
- (a) race, gender, age, religion, national origin or any other arbitrary grounds that may constitute unfair discrimination;
  - (b) the type or number of appeals filed by the provider; or
  - (c) the type or number of complaints or grievances the provider filed or requested for review.
- (12) Where a managed health care organisation proposes to terminate a provider's contract, the notice of termination must include:
- (a) the reasons for the proposed action;
  - (b) a notice that the provider has a right to request a hearing or review, at the provider's discretion, before an impartial panel appointed by the Council for Medical Schemes for that purpose;
  - (c) a period of not less than 30 days within which a provider may request a hearing or review; and
  - (d) a period for a hearing date which must be within 30 days of the date of receipt of the request for a hearing.
- (13) The panel contemplated in sub-regulation (12)(b) must render a decision within three days of such hearing, and must communicate the decision to the provider, and the decision must include reinstatement of the provider, or provisional

reinstatement subject to conditions set forth by the panel or termination of the provider's contract.

- (14) A managed health care organisation may not use a financial incentive that directly or indirectly compensates a provider for ordering or providing less than medically necessary for, or less than appropriate care to, his or her patients.
- (15) Nothing in subregulation (14) should be deemed to prevent a managed health care organisation from using a payment arrangement which- is based on a cost per member per month and which is consistent with the intent of this subregulation.
- (16) Any information pertaining to the diagnosis, treatment or health of any member of a medical scheme or of any dependant of such member must be treated as confidential.
- (17) A medical scheme is entitled to access any treatment record held by the provider and other information pertaining to the diagnosis, treatment and health status of the member in terms of the agreement or arrangement, but such information may not be disclosed by the provider to any other person without the express consent of the member, except for purposes of notification as stipulated in a relevant Act or regulations.
- (18) A managed health care organisation must annually submit to the Council, on application for accreditation, a written quality

assurance plan and a written utilization review plan that includes the following

- (a) the goals and objectives;
- (b) the staffing and contractual arrangements;
- (c) a system for communicating information regarding utilisation review activities to providers and schemes;
- (d) a system for communicating information regarding quality assurance activities to schemes, providers and members;
- (e) the scope of the quality assurance activities;
- (f) the scope and description of the utilisation review activities;  
and
- (g) a description of peer review system.

(19) A managed health care organisation may not prohibit in its rules the initiation of an appropriate intervention by a provider prior to receiving authorisation from the managed health care organisation, where a person presents with any condition that requires immediate medical or surgical intervention.

## **CHAPTER 7: METHODOLOGY**

### **7.0 INTRODUCTION**

To achieve the stated objectives of (a) determining the extent of risk management by medical aids in South Africa and (b) exploring alternatives to managing risk in health care funding, literature relating to risk management and the formulation and implementation of a managed health care strategy will be reviewed. This theory is translated into a semi-structured interview framework (a copy of which is attached as Appendix 7.1) in order to assess the extent of implementation of risk management in the medical aid industry to date.

### **7.1 SAMPLE**

The research study is carried out on a random sample of the medical aid population. A profile of each company included in the sample is then compiled as a result of the interviews.

Given that managed healthcare is a relatively new concept to South Africa the operations of other managed care players falling outside the study will also be reviewed and a company profile compiled. The purpose of this is to determine the benchmarks with respect to the outcomes of managed healthcare strategies and to better assess the relative performance/views/opinions of the sample study to this benchmark of managed care operators.

#### **(1) RANDOM SAMPLE SURVEY**

In order to get an unbiased image of the whole population and to reproduce the characteristics of the whole population it was decided to use a random sample of the medical aid population. A random sample is a sample, which is chosen so that every member of the population is equally likely to be a member of the sample, independently of which other members of the population are chosen (Clarke and Cooke 1983:32). This random sample will be interviewed and the results will be drafted under “results of study”.

A list of names in alphabetical order can be regarded as being in random order with respect to the variant of interest. In these cases a systematic sample from an alphabetical list can be treated as if it were a random sample (Clarke and Cooke 1983:36).

For the purpose of this research study an alphabetical list of medical schemes was granted by Medscheme<sup>28</sup>, the largest administrator in the country. From this list every fifth scheme was selected into the sample. Therefore a sample of seven companies was selected from the population of forty-three.

The sample comprises:

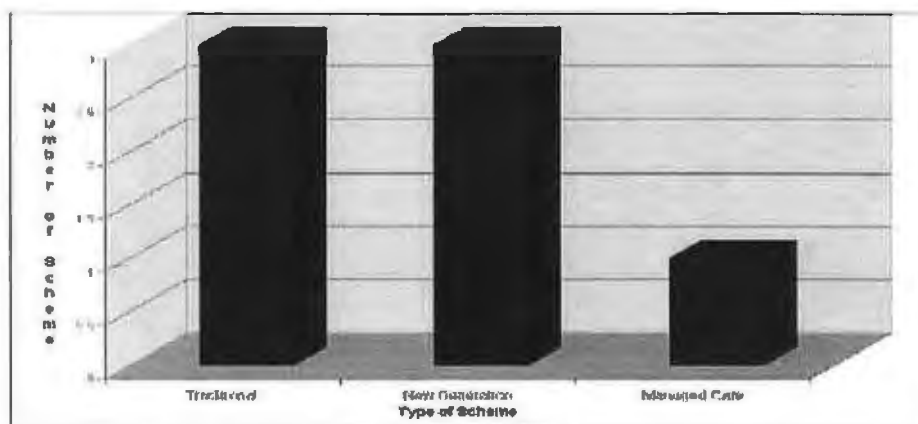
- Bonitas Medical Fund
- Commercial Union Health Medical Scheme
- Finmed Medical Schemes
- Medical Expenses Distribution Society Medsure Medical Aid

- Northern Medical Society
- SAKAV Mediese Helps Fonds
- Southern Healthcare JV

With exception to Medsure all sample companies participated in the study.

The sample population accounts for over 1,5 million covered lives, or 22,3 percent of the medical aid population. The type of companies falling into the sample are a fair representation of the industry given that three of the schemes are traditional schemes by definition, three are new generation schemes and the other offers the full range of managed care services.

**Graph 7.1: Representation in Sample Population**



## 2) REVIEW OF KNOWN MANAGED CARE IMPLEMENTORS

<sup>28</sup> Refer to Chapter 9 for the table on medical aids population.

Insight will also be drawn from a brief analysis of existing managed care players falling outside the ambit of the sample. This will facilitate a relative comparison of how far down the road all the insurance models i.e. traditional schemes, new generation schemes and managed health care schemes are in terms of risk management strategies and the implementation thereof.

Those with known legs of managed healthcare i.e.

1. Sanlam Health,
2. Northern Medical Aid,
3. Southern Health Care JV,
4. Momentum
5. Fedsure Health,
6. Medscheme Managed Health,
7. Galaxy Health,
8. Healthcare Management Services,
9. QA Care,
10. Qualsa,
11. Norwich Health.
12. Medimo

## 7.2 RESEARCH DESIGN

The research design is explorative in nature. The members of the sample will be interviewed and the Delphi technique applied. The Delphi technique, in its simplest form, eliminates committee activity among the experts altogether and replaces it with a carefully designed programme of sequential individual interrogations (usually best conducted by questionnaires) interspersed with information and opinion feedback.

The principles involved in the Delphi technique include:

Sending out a comprehensive questionnaire which can also be asked in an interview,

A follow-up questionnaire is fed back to the respondents, with a summary of the distribution of these responses by stating the average answer. The respondent is then asked to reconsider his/her previous answer and revise it if/she he so desires. If his/her response is extremely contrary to the first answer, he/she is to be asked to state his/her reason. Placing the onus of justifying relatively extreme answers on the respondents has the effect of causing those without strong convictions to move their estimates closer to the median, while those who feel that their argument for a "deviationist" opinion tended to retain their original estimate and defend it. The median of these final responses could then be taken as representing the nearest thing to a group consensus.

On completion of all interviews, notes taken on the extent of risk management implementation in the industry are reviewed. This is to be



compared with the concepts referred to in the literature to see if they apply or whether there are other considerations. The risk management alternatives will be examined. The steps taken by these bodies will be compared with the literature to see whether the actions taken by the implementors complied with the theory.

For the purpose of this report principle number (2) in the Delphi technique will not be strictly adhered to given that the contact person in each organisation is either the Chief Executive Officer or the Managing Director, both of which are difficult to get appointments with. It is thus vital to get the most out of the one session with the individual. Further communication will be conducted telephonically or with other contacts in the organisation.

By conducting in-depth personal interviews with the respective organisations one is able to determine the medical aids' strategy and progress on risk management and managed healthcare.

The guidelines, in terms of the methodology used, for explorative research are described as follows by the 1988 Human Science Research Council Report: (Ferreira & Mouton 1988:140).

*Explorative Research:*

As formulated by Selltitz, Jakoda, Deutch (1965), the objective of explorative research is:

- To gain new insights into the risk management function of the organisation;
- To identify central concepts to study requiring further attention;
- To determine priorities for further research studies;
- To generate hypotheses.

The three components of explorative research as described by Selltitz et al (1965) are:

- A literature survey;
- Interviews with people with practical experience. With the aid of a research schedule, semi-structured interviews will be conducted. A research schedule refers to questions or themes from literature used as important guidelines for interviews. The schedule serves as a control to ensure that subtopics are covered but further questions may arise during the interview to explore specific aspects;
- Analyses of insights.

This research project includes all three components of explorative research.

*Qualitative Framework:*

Research of this nature is qualitative by definition. The process is one where (Buckley 1976:34):

- The findings are conceptualised within a theoretical framework;
- The theoretical frame of reference is guided by a comprehensive literature survey;
- A number of questions orientate the study but further questions can arise during the research interviews;
- Semi-structured interviews in the form of extended discussions and organised listening are used;
- These different methodologies are integrated by the research.

The interviews of this research are semi- structured in order to get the responses of the executives on the central concepts of decision making theory and their application in practise, and also to give enough opportunity for input on new ideas and concepts that have been proven to work in real life situations.

The material gathered during the interviews is analysed. Through a process of analytical induction conclusions can be drawn on: Risk management concepts applied in the medical aid industry and top managements' understanding and strategic thinking on risk management.

### **7.3 COMPANY OVERVIEWS**

A brief overview of each company is given to facilitate a better understanding of the medical aid industry and its players. The overview touches on the company's history, its members, range of services and financial performance. Most of the financial information provided refers to the years 1995 and 1996 as it is the latest available data.

#### ***BONITAS MEDICAL FUND***

##### *Company Profile*

Bonitas registered as a medical scheme in 1982 and targeted black state employees who had previously not been accorded such benefits by the government. It currently caters to over 1000 individual organisations, municipalities and department groups, with state members comprising over 95 percent of the membership base.

##### *Range of Services*

Bonitas is a traditional medical aid still risk rating members by income and number of dependants. Medscheme administers the group's funds,

and hospital utilization management is addressed by Medchemes' Hospi-Serve, the new age hospital benefits management programme.

The group recently introduced savings accounts but according to management, given the low demand, it has not been as popular with Bonitas target market i.e. lower income black market.

The group pays out no-claims bonuses but it plays a relatively unimportant role given the size of the payouts last year i.e. R4 million as compared to total claims paid of R1.1 billion.

#### *Financial Performance*

Bonitas has a sound balance sheet. Despite the decline in membership base, Bonitas has strengthened its financial position considerably and this is reflected in its improved solvency and financial base ratios of 33 percent (1995:27 percent) (Duff and Phelps Credit Rating Co. 1997:27) and 43 percent (1995:40 percent) (Duff and Phelps Credit Rating Co. 1997:27) respectively for the 1996 financial year. The large underwriting surplus and strong investment performance resulted in the cash flow from operating activities improving to R145m, up from only R16m in 1995. Consequently, cash flow to claims paid improved to 14,4 percent (1995:1,8 percent) (Duff & Phelps Credit Rating Company 1997:27).

#### *Member Base*

Despite the scheme's membership base decreasing by 2 percent in 1996 it still caters for 185 000 members or approximately 740 000 beneficiaries, making it the largest open medical scheme. Bonitas has retained its young membership profile, with 83 percent of members being younger than 50 years of age.

## **COMMERCIAL UNION HEALTH MEDICAL SCHEME**

### *Company Profile*

The recently launched fund, (April 1998) plans to enter the market as a new generation medical scheme, that proves affordable and equitable healthcare cover to both groups and individual members.

### *Range of Services*

Hospitalisation and chronic illness benefits are incorporated into their products. The new generation fund offers savings accounts. An innovative inclusion of an insured benefit that covers potentially high-cost out-of-hospital services, differentiates their products from competitors. Commercial Union does offer the initial and crucial elements of managed health care i.e. hospital utilization and pharmaceutical benefit management, including a chronic medication programme, all of which are outsourced.

### *Member Base*

As a young fund it only covers 3520 lives.

## **FINMED MEDICAL SCHEME**

### *Company Profile*

Finmed was established in 1972 and targets the medium-sized corporate market. Finmed introduced a savings-linked product last year. Finmed operates predominantly out in Gauteng and Western Cape, which collectively account for 80 percent of the membership base. Finmed is a traditional medical scheme administered by Medscheme.

### *Financial Performance*

Finmed exhibits a comparatively weak solvency position (Duff & Phelps Credit Rating Co 1997:33). The scheme has a retained cash flow to claims paid ratio of 2,8 percent (1995: 0,6 percent) and cash coverage ratio stands at 1 months cover, compared to 0,7 months cover in 1995.

### *Member Base*

The scheme has lost a large number of members in recent years and membership reduced by a further 14 percent in 1996. The scheme now caters for 18 236 members, down from 24 800 in 1993. However the

stratification by age category evidences a relatively young age profile, with 75 percent of members younger than 50 years of age.

## **MEDICAL EXPENSES DISTRIBUTION SOCIETY (MEDS)**

### *Company Profile*

MEDS was established approximately 35 years ago. The scheme is group based, and is administered by Southern Healthcare Medical Scheme Managers.

### *Financial Performance*

MEDS ended the 1996 financial year on a positive note with an underwriting profit of R6m, as opposed to the poor results recorded in 1992 and 1993 (where underwriting deficits of R18m and R26m were recorded, respectively). Notwithstanding a further 5 percent decline in members, sounder underwriting criteria resulted in premium income increasing 23 percent to R64m (1995:R52m). Claims incurred for the period reduced to R54m (1995:R57m).

From a solvency perspective, MEDS's solvency position improved to 91 percent (1995:77 percent), which is the highest in the industry. Similarly, the retained cash flow: claims paid and cash coverage ratios increased to 25,4 percent and 6 months cover respectively.



### *Member Base*

Large underwriting losses were incurred by the scheme in the early 1990's and this necessitated a substantial increase in premiums, which together with poor service levels resulted in large membership losses (since December 1993, the scheme has lost approximately 62 percent of its membership base) (Duff and Phelps Credit Rating Company 1997:36). Presently the scheme caters for 5 645 members and 8 836 dependants.

## **NORTHERN MEDICAL SOCIETY**

### *Company Profile*

Northern Medical Society (NMS) was established in 1948 and targeted the corporate market. Although the scheme aggressively pursued membership growth prior to 1994, this led to poor underwriting results and the scheme had to consolidate. In 1995/1996 the scheme implemented a number of corrective measures, which included amongst others, high contribution increased surcharges on companies with less than 20 members; and the phasing out of continuation of member subsidies. These initiatives continued in 1997 with removal of direct payment facility for providers in excess of the national claims average; analysing doctors claiming patterns; as well as launching the Chronic Medication Programme and hospital pre-notification.

### *Range of Services*

Hospital pre-authorization, case management and review, profiling of providers; implementation of a chronic medication plan.

### *Financial Performance*

Certain key ratios are still below industry norms. Due to the scheme's contribution re-rating and greater emphasis on cost containment measures, particularly through the wider implementation of managed health care principles, the scheme was able to substantially improve its underwriting result to a R14m surplus (1995:R31m deficit), in spite of an increase in delivery costs from 7,9 percent to 8,5 percent of gross premium income position (Duff & Phelps Credit Rating Co 1997:47).

NMS's solvency ratio improved to 22,6 percent in 1997 (1996:15 percent ;1995:11 percent) (Financial Mail 1998:78), although this is still below industry averages. Furthermore, the scheme demonstrated improved liquidity, as evidenced by a retained cash inflow of R23,1m (1995: R19,3m outflow) and a cash coverage ratio of 1,6 months ( 1995: 1,3 months).

### *Member Base*

The scheme caters for 64 000 members and is independently administered by Northern Medical Administrators which was acquired by Healthcare Management Services, a subsidiary of South African Druggist, in 1997.

## **SAKAV MEDIESE HELP FONDS**

### *Company Profile*

SAKAV was established in 1942 to provide health care for co-operatives in the Cape Province. The scheme expanded into other regions and by 1992 it had managed to capture approximately 95 percent of the co-operative market on a national scale. SAKAV further expanded operations in 1993 by entering the open market.

### *Range of Services*

As much as 50 percent of the member base are on a savings plan. The group includes a co-payment on claims, which range from 10 percent to 30 percent, dependants on the scheme also represented. SAKAV outsources its hospital utilization management to Qualsa. The group does not have a preferred provider network.

The group still has a long way to go in implementing managed care; practitioner health care delivery is still checked retrospectively but the group is starting to compile practice profiling. The group has limited disease protocols and is still investigating drug formularies.

### *Financial Performance*

Despite moderate growth (of 7,5 percent) in both premium income and claims paid, SAKAV's incurred loss ratio declined to 100 percent, following a R3m transfer to reserves. Accordingly, the underwriting loss increased to R6m (1995:R4m loss), notwithstanding the fact that the scheme reflects one of the lowest delivery cost ratios, of only 4 percent of net premium income.

SAKAV was unable to significantly augment its members' surplus, due to the much lower than average contribution increases levied on members during the year. This resulted in a relatively static solvency margin and financial base ratios of 22 percent and 32 percent respectively. Cash flow was also hampered and the retained cash flow to claims paid ratio reduced to 5,4 percent (1995:8,2 percent). Cash coverage sits at 2,8 months cover (Duff & Phelps 1997:50).

#### *Member Base*

The membership base has grown steadily over the past few years, and currently caters for 29 827 members and a further 47 733 dependants. The scheme operates predominantly in the Western Cape region.

### **SOUTHERN HEALTHCARE JV**

#### *Company Profile*

Southern HealthCare JV (SHC) were the first to launch managed care products in January 1997. To date they have seen the largest

investment of all the managed care companies (Heymans 1997:27). The group was formed out of a venture with Anglo American, Southern and United Healthcare (one of the largest managed care providers in the United States of America) and employs 700 people. The association with United Healthcare provides access to expertise and patient information.

SHC being the first managed care player in the South African market faced grievous teething problems but is now the furthest up the learning curve.

Via its association with United Healthcare, SHC has attempted to transplant American information systems and procedures into the local environment. The information systems were some of the most expensive in the market and required considerable adaptation. Initial attempts to create a network of service providers met with considerable resistance and relationships between SHC and the medical fraternity were strained.

- SHC initially signed preferred provider agreements with a limited number of hospitals. After examining a number of issues, including pressure from Competition Board, SHC opened its network to all hospitals willing to sign and abide by the SHC terms.
- Medical practitioners have been threatening to resign from the supplier network because of late payments.

- Service providers have experienced difficulty complying with ICD10 and CTP4 coding systems, which SHC was the first to introduce.

### *Range of Services*

Networking: Southern Health's provider network is more than 4000 providers – including general practitioners and specialists. It is negotiating with others and expects to have close on 6000 providers in the Southern Healthcare Network by the end of 1998. It is important to note that Southern expects doctors on its network to play the role of gatekeeper and feed it patient information timeously. The groups hospital network is wide and incorporates 198 hospitals (a large proportion of the private hospital industry).

SHC uses Mediredit aligned pharmacies for its pharmacy network.

Southern effectively manages the patient through the health care system and they police protocols very closely.

Capitation: SHC underwrites the healthcare risk of a specific product as the quoted rate for a period of 12 months. SHC has the capabilities to implement capitation agreements, but have chosen not to do so at this stage as they focus instead on strengthening its database. It is in the process of analysing data captured since January 1998.

### *Financial Performance*

Southern Health is a scheme established in 1990 and administered by SHC. Premium income for the year ending December 1996 increased by 32 percent. Claims paid for the year increased by 22 percent. The net premium income ratio improved to 80 percent (1995:90 percent). Delivery costs were kept low and thus delivery costs as a percentage of gross premium income decreased to 7,7 percent (1995: 11,9 percent). Key financial ratios strengthened further during 1996 as a result of a much improved bottom line surplus. Solvency stood at 44 percent (1995:32 percent) and the cash coverage ratio improved to 8,7 months cover (1995: 5,7 months). Southern Health demonstrates a strong cash flow position, as indicated by a retained cash flow: claims paid ratio of 34 percent, which is one of the strongest in the industry (Duff & Phelps Credit Rating Co. 1997: 54).

### *Member base*

Southern have 110 000 beneficiaries on managed care at present and targets to double this figure in 1998. There are an additional 150 000 lives under administration which also utilise modules of managed care.

## **OTHER MANAGED CARE OPERATORS OUTSIDE SAMPLE**

For the purpose of comparison, herewith an overview of managed healthcare players in the South African environment.

### **SANLAM HEALTH**

#### *Company profile*

Sanlam has invested much capital in exploring and initiating managed healthcare. As one of the forerunners in developing this concept in South Africa it emerged with what appears to be irreparable scars. The group typically targets the private medical aid market but has broadened its product range to include the lower end of the market. In July 1997, Sanlam and Vuna Health Care, a subsidiary of Thebe Investments, formed a joint venture company called South African Health Alliance (SAHA). SAHA will target the lower end of the market, typically those in formal employment but not on medical cover.

After experiencing a lot of resistance to its aggressive managed healthcare proposals, Sanlam has made a real effort to improve its provider relationships:

- Sanlam Health was the first company to introduce a professional fee that was acceptable to the pharmacies (R18,33 per item). An agreement in this regard was signed with United



South African Pharmacies (USAP), consisting of 1200 pharmacies,

- After an appeal from certain hospitals, reimbursement agreements for 1998 have been renegotiated on more favourable terms;
- Together with the South African Managed Care coalition, Sanlam Health has launched a public company called African Health Synergies (Pty) Ltd that will operate as an independent, self-regulated network of service providers. Sanlam invested R2m in this venture and a further R1,2m has been supplied as loan capital.

#### *Range of Services*

Sanlam Health manages hospital and pharmaceutical utilization with the use of pre-authorisation, on-line case management, a nurse-line and claims auditing. At the last count Sanlam Health reported a 20 percent savings on bed days per 1000 members that it manages.

A preventative initiative was to be launched in January 1999 with a maternity and mammography programme for beneficiaries on the Sanmed scheme.

A fraud unit was introduced in 1997. This division has made significant strides in identifying fraud by providers and members (Sunday Times Business Times 1998:6).

Sanlam's provider network includes 108 hospitals in the nine provinces, reimbursed on a per diem basis.

## **DISCOVERY HEALTH**

### *Company profile*

Discovery Health was founded in 1992. The decision to launch a medical insurance product in 1994 has resulted in enormous growth for Discovery, previously called Momentum Health. Premium income rose from R10m in 1994 to R331m in the financial year ending June 1997. Although growing at such a high rate, administration systems coped and solvency remained intact as a result of sound underwriting principles. Discovery now enjoys a dominant position in the new generation health insurance market.

Although Discovery Health is investigating the lower end of the market, its primary focus is the Upper B income group. The pricing of its products make this an attractive option for the young and healthy, although they have recently introduced a scheme to meet post-retirement medical scheme requirements.

### *Range of Services*

Discovery's managed care activities primarily cover hospital utilization and have signed provider agreements with hospitals. They have 33 full-time nurses that handle on-line case management for hospital admissions and management of their maternity programme. The distribution of acute and chronic medicines has been outsourced to Medcredit and Direct Medicines. Retrospective reviews of hospital utilization are managed in-house.

Discovery has developed its own clinical systems to investigate appropriateness of treatment and facilitate data warehousing to allow peer review of service providers. Discovery's plans were to introduce a nurseling in January 1998 to support the clinical department.

Future plans include the introduction of clinical guidelines, disease management programmes and dental benefit management.

### *Member Base*

Discovery has 200 000 lives on its savings plan and an estimated 500 000 lives in total.

## **FEDSURE HEALTH**

### *Company Profile*

Fedhealth, employing 600 people, has shown exceptional growth in the past three years with its savings accounts offering much attraction. Fedhealth is making a big drive into the market with its recent acquisition of a 30 percent stake in South African Druggist and majority stake in Norwich (holding company of D&E). Further acquisitions in the course of 1998 could see the group's member base exceeding 500 000 principal lives.

Fedhealth plans to target the emerging blue-collar market. The group is designing a user-friendly lower end of the market products that will be supported by sophisticated identification technologies.

### *Range of Services*

Fedhealth has a medical savings scheme product in which hospitalisation and chronic diseases are managed. The management of hospital utilization has been outsourced to MX Health. This relationship is being revised given the groups strategy to acquire HMS and its component parts.

If the aforementioned acquisition is successful we could expect the group to explore more comprehensive managed care products, such as capitation of GP services, in future. The group should then have a

comprehensive hospital network i.e. owns 25 percent of Netcare, and a comprehensive primary care network with GPNet and Medicross.

#### *Member Base*

Fedsure Health has close to 350 000 members (i.e. Fedhealth 110 000, D&E 110 000, NMA 110 000). Fedhealth's principal members are growing at 40 percent per annum.

### **MEDSCHEME MANAGED HEALTHCARE (MMH)**

#### *Company Profile*

Medscheme are the largest medical administrators in South Africa with 2 million lives under administration, this is almost a third of the private medical aid market. MMH's strategic direction appears to be driven by the need to capitalize on their large patient base.

Access to this large patient base offers significant advantages:

- **Patient information:** A long track record in claims administration has enabled Medscheme to accumulate an extensive database of pharmaceutical and hospital usage according to diagnostic and procedure codes. This data was used to publish minimum quality criteria for chronic medicine prescribing, which was accepted by the South African Managed Care Coalition (SAMCC).

- **Bargaining power:** The sheer size of Medscheme allows them to negotiate discounts with service providers. So far, Medscheme has provider arrangements with 150 hospitals and over 300 doctors. Currently PBM is negotiating preferential medicine priced with dispensing doctors and pharmacists.
- **Competitive pricing of services.** Increased bargaining power will assist Medscheme to lower its cost base and provide competitively priced services as it moves from discount-based arrangements to risk-sharing with providers.

#### *Range of Services*

Medscheme was historically labelled as a “traditional” medical aid, but it has more recently become more aggressive, offering new generation options such as savings account and managed healthcare alternatives.

Medscheme believes it has the widest range of managed care products available, all of which utilize their integrated databases.

Its product offering includes:

- Hospital benefit management, supported by a contracted network of hospitals;
- Clinical advisory services;

- A disease management programme, for addressing Aids , among other;
- A dental benefit management programme;
- An optical benefit management programme;
- Chronic medication benefit management;
- MedBenefit – a programme to incentivise a healthy lifestyle;
- Member and general practitioner profiling services;
- Two integrated managed care projects involving primary care practitioners who co-ordinate patient referrals to contracted hospitals.

Their pharmaceutical utilization management capabilities, through PBM Pty Ltd, are of the best in the industry. PBM was the first company to launch a chronic medicine programme after which it developed a utilization management system to monitor acute medication. PBM provides pharmaceutical utilization services for 1,8m lives, 70 percent of these being Medscheme members. Its activities include pre-authorisation, profiling of scripts, negotiating discounts, retrospective reviews and clinical interventions with regards to appropriateness and generic substitution.

In conjunction with MMH, PBM will manage chronic diseases such as diabetes, asthma, peptic ulcers and coronary artery disease. They are in the process of launching an HIV/Aids management programme.

MMH and PBM have successfully launched an integrated managed care programme for 10 000 lives. Features include risk sharing with

doctors and contracted hospitals, a drug formulary, hospital case management and joint clinical case management between MMH and PBM. This integrated programme has been kept to a small scale and is the start of MMH's move towards the underwriting of healthcare costs.

The group offers hospital benefits management through Hospi-Serve. The programme was launched in 1996 and by the end of 1997 Hospi-Serve had enrolled 16 medical schemes, covering more than 1,1 million lives. Hospi-Serve has 38 managed care staff in Johannesburg, Cape Town and Durban, supported by a head office team comprising two doctors, a project manager, a systems analyst, a coding coordinator and a researcher.

Hospital Network: Mr Reg Magennis, Managing Director of Medscheme's Managed Care Division, says the Hospital Network involved contractual relationships between his company and 152 hospitals operated by Apex and National Hospital Network. The hospitals have agreed to fixed fee tariffs and discounts for members of schemes administered.

"We are starting a transition from a dictatorial approach to a co-operative approach," says Mr Magennis. " We are moving towards risk – sharing. We are re-engineering incentives in the market place to ensure that hospitals receive better services for their own efficiencies."(Outcomes 1998:2).



### *Member Base*

By virtue of the 2 million strong patient base, MMH will be a strong contender in the managed care arena. Like other medical schemes, Medscheme lost beneficiaries with the emergence of the new generation schemes from Momentum and Fedsure Health. Defensive measures were taken and products and marketing strategies re-engineered.

Medscheme's membership levels were recently restored when Medscheme took on the administration of Polmed. Medscheme administers medical schemes from a wide range of income groups, including the low-end schemes like Bonitas and Sizwe Medical.

## **GALAXY HEALTHCARE SOUTH AFRICA**

### *Company Profile*

Galaxy is a 44 percent subsidiary of the insurance group Hollard. The other 56 percent is held by Universal Healthcare. Galaxy Healthcare is a new entrant in the managed care market and started operations in January 1998 when it assumed management of Telkom's medical scheme, Telemed. The contract for the management of Telemed's 90 000 beneficiaries was won after it was put out for tender of which 22 contenders bid.

Galaxy's role is one of re-engineering the medical schemes based on managed care principals. Galaxy does not charge a fee for its service but rather shares in any savings generated as a result of its systems.

Galaxy has aligned itself with short-term insurer Universal Healthcare. Galaxy will manage the risk that Universal assumes when insuring medical schemes.

#### *Range of Services*

Galaxy implements a full managed care software package and facilitate other healthcare requirements like risk insurance agreements with service providers.

#### *Member Base*

The contract started with 90 000 members and a further 50 000 lives was to be added during the first part of 1998.

## HEALTHCARE MANAGEMENT SERVICES (HMS)

### *Company Profile*

Healthcare Management Services (HMS) is 100 percent owned by pharmaceutical giant South African Druggist. HMS took a different approach to many in its entrée into the medical market. It bought out carefully targeted businesses with substantial track records in complementary medical fields. The group thus avoided most of the teething problems. This unique approach brought into the HMS orbit all the components of a highly professional managed care service. Within the HMS stable one will find:

- *Managed Care* : (a) MSO - administrator (b) Mediscor – pharmaceutical utilization (c) Dentmate – dental programme;
- *Northern Medical Administrators*
- *Medicross* – 32 clinics countrywide, housing general practitioner services, pharmacy, dentist, radiology, optometry and physiotherapy.
- *Service providers* – (a) GPnet – network of doctors (b) Link – pharmacy franchise (c) Ampath – pathology services.
- *Professional Services*

HMS has a fairly extensive provider network, via their ownership of healthcare providers Medicross, Ampath and Link franchise. Unlike other managed care companies they have negotiated discounts for volumes. HMS has to date no agreements with hospital networks. Yet, co-parent Fedsure with a 30 percent stake in SA Druggist has a similar stake in the Netcare group of hospitals, which would render a relationship feasible.

Hospital admissions are managed on a case by case basis and cost saving measures are being implemented. HMS has proven savings of 20 percent on hospital costs for the Malkor medical scheme.

#### *Range of Services*

HMS is primarily involved with hospital utilization management, management of specialist referrals and procedures and dental utilization. Tools employed to do this include, pre-authorisation, case management of hospital admissions and chronic beneficiaries, peer review/profiling of service providers, claims auditing and clinical intervention with the use of in-house developed protocols.

Case management is conducted by nurses and doctors in GPnet and Medicross. Disease management programmes, which are still at an early stage, including diabetes and hypertension. Other high cost areas such as maternity and radiology are also monitored.

HMS will assume risk. Besides a primary care capitation product being offered through Mediacross, HMS will assume the full risk of the total healthcare cost of a medical aid. No agreements have yet been signed in this regard.

As far as managing pharmaceutical benefits is concerned, HMS, owns **Mediscor Pharmacy Benefits Management System (PBM)**. The retrospective nature of claims processing currently utilised by Clearing houses in South Africa were not designed to cope with the increasing demands for sophistication required to introduce managed care principles.

Limitations of the current prescription claims processing systems are:

- Increased financial risk at the service provider levels due to exceeded benefits and rejections;
- Regression of service provider payment periods;
- Inability at administrator level to effectively implement managed care tools;
- Loss of potential medicine rebate income at medical scheme level;
- Inability to implement formularies and conduct concurrent utilization reviews;
- Lack of ability to customise and accurately budget medicine benefits;
- Escalation of paper mountains.

As a result of the aforementioned limitations Mediscor is introducing a fully integrated on-line transaction processing point of sale pharmacy

benefit system i.e. PBM. The new fourth generation Mediscor PBM acquired from a United States supplier will become operational during the third quarter of 1998.

The role of a PBM is to offer a range of organisation activities designed to influence the behaviour of physicians, pharmacists, and patients, in order to facilitate the best quality of pharmaceutical utilization and care, at the lowest possible cost.

*PBM's benefits to medical schemes:*

- Centralized control of medicines benefit utilization
- Effective control of medicine costs
- Appropriate medicine benefit design
- On-line claims adjudication and drug utilization review
- Prior authorisation for chronic conditions
- Cost-effective drug formulary management
- Deductible, co-payment or co-insurance levy management
- Financial, utilization and management reporting
- Accurate medicine benefit budgeting

*Member Base*

The acquisition of NMA in November 1996 gave HMS access to a patient base of 500 000 lives. This base has remained constant since but a cautionary announcement put out by both parent companies i.e.

SA Druggist and Fedsure allows one to speculate that a fundamental change is lurking.

Through Mediscor, HMS has access to 1,2 million lives i.e. nearly 20 percent of the covered population. The management of drug utilization of about 420 000 of these lives will commence in 1998. D&E is one of Mediscor's largest clients for claims processing.

## **QA CARE – HOSPITAL UTILIZATION MANAGEMENT**

### *Company Profile*

Hospital utilization Management Company QA Care focuses exclusively on the hospital related aspect of managed healthcare.

With a staff of 60 people - including qualified medical/nursing personnel supported by sophisticated computer systems - QA Care authorises admissions and manages at least 250 hospital admissions a day through its offices in Randburg, Cape Town, Port Elizabeth, Durban and Pretoria. Between them, these offices support a national network of case managers who cover every hospital.

QA Care says due to hospital cost reductions, without sacrificing quality, one of its medical scheme clients had its latest member annual subscription increased to 12 percent compared with a national average of 25 percent to 30 percent.

### *Range of Services*

The overall objectives of QA Care are attained as follows:

- Continuously gathers and interprets data in order to improve on the services offered to members and their medical schemes;
- Applies clinical protocols to assess necessity and appropriateness of care/hospitalisation which have been developed in collaboration with specialist bodies;
- Conducts concurrent reviews in order to formulate and implement a case management plan;
- Negotiates with service providers in order to determine appropriate facilities;
- Conducts prospective reviews, in order to ascertain which members require education on their condition and assistance with discharge planning;
- Conducts retrospective reviews in order to compare the authorisation and case management notes with the amount billed;
- Source – and – promote the use of out of hospital services;
- Utilises and promotes the use of resources within the community;



- Provides comprehensive reports on utilization, costs and clinical effectiveness of tertiary medical services.

#### *Member base*

The scheme covers over 100 000 members, with D&E as the largest client.

### **QUALSA**

#### *Company Profile*

The group is 70 percent owned by management and 30 percent owned by Hollandia Re-insurance Group. Qualsa has positioned itself as a hospital utilization management company servicing the needs of the private medical aid industry. It charges a fixed fee per member per month and has not entered into any risk taking or sharing agreements with funders or providers. Yet in a short period of time Qualsa has demonstrated significant savings for the schemes they manage.

Qualsa plans to remain a specialist hospital utilization management company and does not foresee any changes to its strategy in the very near future (Heymans 1997: 24).

#### *Range of Services*

Not dissimilar to QA Care, Qualsa conducts pre-authorisation, on-site and telephonic case management, concurrent review and claims auditing. It also covers the management of the following diseases: diabetes, hypertension, asthma and rheumatic illnesses. They also offer a case management service to psychiatric, transplant patients and stereotactic surgery (an expensive out-of-hospital procedure) patients. Qualsa employs in-house guidelines but does not intervene with the clinical judgement of the physician.

After 16 months of operation, Qualsa has demonstrated the following cost savings: 7 percent on admission management; 20 percent to 40 percent on medical and surgical case management; 35 percent on perinatal management; 30 percent on mental health management and 30 percent on claims auditing.

#### *Member Base*

Qualsa has shown rapid growth since its launch in October 1996 and presently conducts hospital utilization for 400 000 lives.

## **NORWICH HEALTH**

### *Company Profile*

The recent entry of Norwich into the managed care arena was a logical move for Norwich Holdings which owns the second largest medical aid administrator, Davinson & Ewing (D&E). Norwich Health's late entry into the market leaves them with some catching up to do, but has probably allowed them to learn from some of the expensive mistakes made by their competitors.

### *Range of Services*

Hospital and pharmaceutical utilization management will be outsourced initially, the former currently sits with QA Care. They plan to bring these functions in-house relatively soon especially with Fedsure Holdings recent acquisitions of Norwich Holdings.

Norwich has signed provider agreements with a number of IPS' and has approximately 4000 doctors in its network. Hospital agreements have been signed with National Hospital Network and Netcare.

### *Member Base*

Norwich Health has access to D&E's 450 000 patient base. They will start operations with approximately 40 000 lives under management. They target to have 100 000 lives on managed care plans by February

1999. Norwich is likely to establish itself as a dominant player in specific geographic areas where D&E has a strong presence. The Eastern Cape is a traditional stronghold.

## **MEDIMO**

Medimo is no longer in practice but deserves a mention, given its early foray into the offering of capitation products, for the purpose of illustration.

### *Company Profile*

Medimo was a joint venture established by Afrox Health and Medi-Clinic. After six years of operation, Medimo had been slow in generating returns and its markets are being threatened by new entrants. This led to the holding companies closing down the operation in 1998.

Medimo's approach to managed care was via the primary care physician network. Medimo monitored costs and quality by facilitating peer reviews regulated by the doctors themselves. The approach was well received by the doctors and they had signed agreements with 80 percent of all practising GP's in South Africa.

Recently Medimo ran into trouble and incurred substantial losses when assuming risk on a capitation product for the Mines Benefit Society.

### *Range of Services*

Medimo offered hospital benefit management via a pre-authorisation and claims auditing process. Other services offered by Medimo included the management of radiology, pathology utilization and high-cost chronic disease including asthma, cholesterol, diabetes, addictions, rheumatic and cardiovascular diseases. They also group offered capitation products.

### *Information systems*

All software and systems were home-grown and were able to accommodate a wide range of managed care services and the general coding categories but claims processing systems appeared to be less than adequate.

### *Member Base*

Although one of the first to enter the managed care arena six years ago, Medimo's patient base remained relatively small. It had a base of 140 000 lives from 17 medical aids, the larger of these being Esméd with 60 000 beneficiaries. The base was too small to be economically viable.

**APPENDIX 1****MEDICAL AIDS POPULATION, 1997**

|                                             |                                     |              |
|---------------------------------------------|-------------------------------------|--------------|
| Allacare Medical Aid Scheme                 | PO Box 2650<br>Rivonia<br>2128      | 011-807-1490 |
| Alliance Medical Benefit Society            | PO Box 2004<br>Randburg<br>2125     | 011-329-0500 |
| Beland Medical Aid                          | <i>Box 974</i><br>Southdale<br>2135 | 011-490-2400 |
| Bestmed Medical Fund                        | PO Box 2297<br>Pretoria<br>0001     | 012-326-9111 |
| Bonitas Medical Fund                        | PO Box 2020<br>Randburg<br>2125     | 011-329-0500 |
| Caremed                                     | PO Box 90<br>Howard Place<br>7450   | 021-509-9111 |
| Cape Medical Plan                           | PO Box 966<br>Parow<br>7499         | 021-937-8300 |
| Commercial & Industrial Medical Aid Society | PO Box 82540<br>Southdale<br>2135   | 011-490-2400 |

|                           |                                     |              |
|---------------------------|-------------------------------------|--------------|
| (CIMAS)                   |                                     |              |
| Compcare Medical Scheme   | Pr Bag X42<br>Rivonia<br>2128       | 011-807-4610 |
| CU Health Medical Scheme  | PO Box 75405<br>Garden View<br>2047 | 011-453-8910 |
| Docmed Medical Scheme     | PO Box 16332<br>Lyttleton<br>0157   | 012-664-1648 |
| East Coast Medical Plan   | PO Box 12052<br>Centrahil<br>6006   | 041-551-873  |
| Fedsure Health (FEDMED)   | PO Box 2916<br>Randburg<br>2125     | 011-239-8000 |
| Ferromed                  | PO Box 40599<br>Arcadia<br>0007     | 012-421-2000 |
| Finmed Medical Scheme     | PO Box 2006<br>Randburg<br>2125     | 011-329-0300 |
| Hosmed Medical Aid Scheme | PO Box 4709<br>Johannesburg<br>2000 | 011-335-7335 |
| Lifemed Medical Scheme    | PO Box 1411                         | 011-807-4610 |

|                                                    |                                      |              |
|----------------------------------------------------|--------------------------------------|--------------|
|                                                    | Rivonia<br>2128                      |              |
| Malesela Medical Scheme                            | PO Box 45<br>Sanlamhof<br>7532       | 021-947-9111 |
| Meddent Medical Scheme                             | PO Box 9153<br>Johannesburg<br>2000  | 021-407-3800 |
| Medical Expenses<br>Distribution Society<br>(MEDS) | PO Box 10178<br>Johannesburg<br>2000 | 011-335-3555 |
| Medical Service Plan                               | Pr Bag X3011<br>Randburg<br>2125     | 011-329-0500 |
| Medicover 2000                                     | Pr Bag X20<br>Gardenview             | 011-622-6111 |
| Medihelp                                           | PO Box 26004<br>Arcadia<br>0007      | 012-334-2000 |
| Medimed Mediese Skema                              | PO Box 45<br>Sanlamhof<br>7532       | 021-947-9111 |
| Medsure Medical Aid                                | Pr Bag X11<br>Roggebaai<br>8012      | 021-410-1488 |



|                                                        |                                     |              |
|--------------------------------------------------------|-------------------------------------|--------------|
| Medshield Medical Scheme                               | PO Box 9471<br>Johannesburg<br>2000 | 011-407-3800 |
| National Medical Plan                                  | PO Box 2388<br>Durban<br>4000       | 031-366-5500 |
| NBC Medical Aid Society                                | PO Box 47125<br>Parklands<br>2121   | 011-880-1447 |
| National Independent<br>Medical Aid Society<br>(NIMAS) | PO Box 1790<br>Durban<br>4000       | 031-301-2791 |
| Northern Medical Society                               | Pr Bag x6<br>Excom<br>2023          | 011-497-8411 |
| Premier Medical Plan                                   | PO Box 95<br>East London<br>5200    | 0431-21227   |
| Pretmed                                                | PO Box 3497<br>Pretoria<br>0001     | 012-326-5673 |
| Protea Medical Aid Society                             | PO Box 6112<br>Roggebaai<br>8012    | 021-590-5398 |
| Regional Medical Aid<br>Scheme                         | PO Box 9308<br>Johannesburg         | 011-332-7400 |

|                               |                                       |              |
|-------------------------------|---------------------------------------|--------------|
|                               | 2000                                  |              |
| SAKAV Mediese Help Fonds      | PO Box 33<br>Hoofstraat<br>7622       | 021-872-1437 |
| Sanitas Medical Scheme        | PO Box 2825<br>Qualbert<br>4078       | 031-304-2621 |
| Selfmed Mediese Skema         | PO Box 45<br>Sanlamhof<br>7532        | 021-947-8250 |
| Stability Medical Aid Society | PO Box 5703<br>Johannesburg 2000      | 011-486-1702 |
| Southern Health               | PO Box 10296<br>Johannesburg 2000     | 011-335-3260 |
| Tafelberg Medical Aid         | PO Box 6175<br>Roggebaai 8012         | 021-592-4820 |
| Topmed Mediese Skema          | PO Box 45<br>Sanlamhof 7532           | 021-947-8006 |
| Vaalmed                       | Pr Bag<br>X020<br>Vanderbijlpark 1900 | 016-9330-001 |
| Visimed                       | PO Box 567<br>Bloemfontein 9300       | 051-409-0111 |

Source: Medscheme

## **APPENDIX 2**

### **INTERVIEW FRAMEWORK**

#### **1.0 GENERAL**

##### **1.1 GENERAL INFORMATION ON THE COMPANY**

- Name of company?
- Title of interviewee?
- Number of members and beneficiaries on the scheme?

##### **1.2 BROAD RISK MANAGEMENT PRINCIPLES AND ISSUES PLAGUING THE HEALTH CARE INDUSTRY**

- Do you practice risk management?  Y /  N
- What type of professional would sit on the risk management committee?
- Do you have set resources dedicated to risk management?  Y /  N

##### **2.2 RISK IDENTIFICATION**

- How do you identify risks?
- How are risks pooled?
  - ❖ Age;  Y /  N

- ❖ Income bracket;  Y /  N
- ❖ Gender; Health status;  Y /  N
- ❖ Geographics;  Y /  N
- ❖ Other
- How do you assess future risks?

### 2.3 RISK EVALUATION

- Which tools are used?
- To what use do you put collated data?

### 2.4 RISK TREATMENT

#### 2.4.1 Risk Control

2.4.1.1 Do you apply the risk control technique of avoidance?  Y /  N

2.4.1.2 Do you apply risk reduction through claims management?  Y /  N

#### 2.4.2 Risk Financing

2.4.2.1 Which remuneration system do you use? :

- ❖ Fee-for-service;  Y /  N
- ❖ Discounted fee-for-service;  Y /  N
- ❖ Global fee;  Y /  N
- ❖ Per diem rates;  Y /  N
- ❖ Diagnosed-related groups;  Y /  N
- ❖ Capitation;  Y /  N

2.4.1.2 Do you envisage a change in the remuneration system in future?

Y /  N

2.4.1.3 How do you provide for costs:

- Retention  Y /  N
- Reinsurance  Y /  N
  - If risk retention is applied, do you:
    - Treat losses as a current expense  Y /  N
    - Create reserves for loss liabilities  Y /  N
    - Borrow the funds at the time of the loss  Y /  N

### 3.0 HEALTH CARE OPTIONS

#### 3.1 Co-payment plans

3.1.1 Have you implemented/explored co-payment plans?  Y /  N

- Do you believe that co-payment:
  - (a) Reduces moral hazard  Y /  N
  - (b) Increases the consumer's sensitivity to the true cost of the care?  Y /  N

#### 3.2 Bonus and/or rebates options

- Do you implement bonus or rebate options?  Y /  N
- Do you payout a fixed rebate for no claims made during any one year ?  
 Y /  N

### 3.3 Savings Accounts

- Do you offer the option of medical savings accounts?  Y /  N
- What would you consider to be the positives or negatives to this structure?

### 3.4 Case- management/utilization management?

- Do you pursue case management?  Y /  N
- Is this done  Internally or  outsourced ?
- What is your definition of case management ?
  - ❖ Is each claim reviewed?  Y /  N
  - ❖ Who reviews the claims? (list profession of the individual conducting the claims management)
  - ❖ Are the information technology systems sufficient to capture claims patterns and communicate with doctors and monitor provision of care?  
 Y /  N
  - ❖ Are these claims patterns used to assess future risks?  Y /  N
  - ❖ Do you have protocols for each disease?  Y /  N
  - ❖ Do you work off a drug formulary?  Y /  N

### 3.5 Do you currently implement or intend on implementing managed health care principles ?

- What active steps towards managed health care has the organisation already taken example:
  - ❖ Pre-authorization of hospitalisation,  Y /  N
  - ❖ Case management;  Y /  N

- ❖ Drug review  Y /  N
- ❖ Quality of health delivery control;  Y /  N
- ❖ Preferred provider status with any specific hospital network or doctor organisation?  Y /  N

- What are the barriers to implementation of managed health care?

- ❖ Availability and reliability of data  Y /  N
- ❖ Doctor participation as gatekeeper  Y /  N
- ❖ Information systems across the entire health continuum  Y /  N

- If you were to rank the five alternatives above in terms of the better risk management strategy, how would they rank?

- ❖ Co- Insurance \_\_\_\_\_
- ❖ Bonus & rebates \_\_\_\_\_
- ❖ Claims management \_\_\_\_\_
- ❖ Savings Accounts \_\_\_\_\_
- ❖ Managed health care \_\_\_\_\_

- Do you have any data on the outcome of implemented programmes?

#### 4.0 Draft policy on financing of health care in South Africa

- How will the pending legislation, with respect to community rating, impact the industry at large, and its ability to manage risk?

## **CHAPTER 8: RESULTS AND DISCUSSION OF RESULTS**

This chapter covers the exploratory work, more specifically the results of the study on the sample population. The results of the study are then briefly compared to the views held by the managed care population and a conclusion is drawn on each result.



## 8.1 RESULTS

### 8.1.1 GENERAL INFORMATION ON THE COMPANY

"Name of company?; Title of interviewee? Number of members and beneficiaries on the scheme?"<sup>29</sup>

(a) Schemes contacted as part of sample survey

**Table 8.1.1 : General information on each medical scheme**

|   | COMPANY                               | INTERVIEWEE     | TITLE                     | MEMBERS<br>1998 | BENEFICIARIES<br>S 1998 |
|---|---------------------------------------|-----------------|---------------------------|-----------------|-------------------------|
| 1 | Bonitas Medical Fund                  | Bafana Nkosi    | Managing Director         | 185 000         | 740 000                 |
| 2 | Commercial Union                      | Steve Novis     | Managing Director         | 1 600           | 3 520                   |
| 3 | FinMed Medical Schemes                | Eric Wilson     | MD Medscheme Managed Care | 18 236          | 40 119                  |
| 4 | Medical Expenses Distribution Society | Rob Leonardi    | Chief Operating Officer   | 5 645           | 8 836                   |
| 5 | Northern Medical Society              | Jeff Sloame     | Managing Director         | 64 000          | 110 000                 |
| 6 | SAKAV Mediese Fonds                   | Leon Laubsher   | Managing Director         | 29 827          | 77 560                  |
| 7 | Southern Health                       | Graham Anderson | Chief Executive Officer   | 50 000          | 110 000                 |
|   | <b>TOTAL</b>                          |                 |                           | <b>354 308</b>  | <b>1 090 035</b>        |

As Table 8.1.1 illustrates the sample population, including both members as well as beneficiaries) accounts for 1,5 million, or

<sup>29</sup> Summary of the questions in Appendix 7.1

22,3 percent, of the 6,7 million covered lives in the country. The individuals interviewed all held senior positions i.e. five managing directors and two chief executive officers. It is a fair assumption that individuals holding such senior positions within a firm would play a pivotal role in the organisations strategy on risk management.

*(b) Managed health care participants*

**Table 8.1.2: Number of covered lives under each medical scheme with a managed care programme**

| <b>COMPANY</b>                 | <b>LIVES/BENEFICIARIES</b> |
|--------------------------------|----------------------------|
| Sanlam Health                  | 600 000                    |
| Momentum Health                | 200 000                    |
| Fedsure Health                 | 110 000                    |
| Medscheme Managed Healthcare   | 1 100 0000                 |
| Galaxy Healthcare              | 200 000                    |
| Healthcare Management Services | 500 000                    |
| QA Care                        | 100 000                    |
| Qualsa                         | 400 000                    |
| Norwich                        | 40 000                     |
| <b>TOTAL</b>                   | <b>3 250 000</b>           |

All of the managed care players featured in the table above are medical funders with exception of QA Care and Qualsa who manage third party hospital utilization.

The sum of the two groups i.e. sample population plus managed care population, even though there are some overlays for example with Bonitas and Medscheme, essentially dominate the medical aid population in South Africa, and are hence clearly representative of the population.

### 8.2.2 BROAD RISK MANAGEMENT PRINCIPLES

- |                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• "Do you practice risk management?"</li><li>• What type of professional would sit on the risk management committee?</li><li>• Do you have set resources dedicated to risk management?"</li></ul> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### *(a) Schemes contacted as part of sample survey*

All of the schemes responded positively to the first question of practising risk management in so far as risk identification, evaluation and risk financing is concerned.

On the question of who sits on the risk committee, 2 out of the 7 sample companies had health professional on their committee and only these two recalled setting aside resources for risk management. The other 5 did not have health care representatives on their risk committees.

#### *(b) Managed Healthcare participants*

The essence of managed care is one of a broader application of risk management techniques. Managed care players differentiate themselves from the sample population in their broader application of risk treatment techniques.

On the issue of risk management committees, it appears that the managed care players have a plethora of nursing skills but only a minority have general practitioners or specialist on-board. Many, however, state that they can tap into such resource when necessary.

*(c) Additional views emanating from interviewees<sup>30</sup>*

1. Rob Leonardi, chief operating officer of Southern Healthcare expresses the fact that medical aids in this country have differed from classic insurers as a direct result of the Medical Schemes Act of 1967, whose underlying assumptions and restriction inhibited the interventionist role of Medical Schemes. There were, however, certain fundamental principles that underpinned this Act:

- The Act assumed that the number incoming younger members would equate to outgoing older members;

- The conventional insurers would not be allowed to compete in medical funding, which has not been the case since the amendments to the Act in 1989 and 1993 and with the resulting advent of new generation schemes.
- That utilization rates would remain constant. Yet due to advancing technology, changing practitioner profiles and changed consumer expectations, this is no longer the case.

*(d) Discussion of results*

Even though the interviewees answered positively to implementing risk management, it was clear that the extent of risk management practised was questionable. It was apparent that most peoples' views on the definition of risk management encompassed only risk identification and risk financing. Risk evaluation and risk treatment were often sorely lacking. This difference of definition distorts the view given when 100% of interviews affirm they practice risk management.

Barring in mind that the legislative environment, with its guaranteed payments and prescribed minimum benefits, often denied the industry the opportunity to apply risk management in its more comprehensive form as explored in Chapter 3.

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<sup>30</sup> Any additional views expressed by the interviewee will be elaborated under this heading. Where views are considered controversial the speaker will not be identified but different speakers will be distinguished from one another by the comment numberings.

### 8.1.3 RISK IDENTIFICATION

- "How do you identify risks?"
- How are risks pooled?
- How do you assess future risks?"

#### *(a) Schemes contacted as part of sample survey*

Six out of the seven sample companies still identify risks based on what is termed "conventional income tables", where individuals are risk rated based on their respective income brackets. A medical scheme would they then apply the practice of risk pooling. After forming risk pools, 86% of the sample population, community rate based on the outcomes of a checklist<sup>31</sup>, with claims history identified as playing an important role in risk identification by all sampled members.

Four of the seven sampled insurers have started identifying risk based on age tables and number of dependants as opposed to the conventional income tables.

Only one of the schemes have started using tools such as *disease management* and *preventative care programmes* as a means of assessing future risks. This particular

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<sup>31</sup> Refer to Chapter 2, paragraph 2.3.2.1 for more detail on "checklists".

scheme has also invested heavily on information technology systems and is mining data to identify trends that could result in future risks.

*(b) Managed Healthcare participants*

The tools used to identify risks were not dissimilar to that expanded on by the sample population. However increasingly more emphasis is being placed on the ability to collate material data with the aid of information technology in order to apply tools to better assess future risks.

*(c) Additional views emanating from interviews*

- 1) Savings accounts cherry picked the better risks, as a result of this, younger healthier people have opted out of traditional schemes, in favour of the cheaper savings accounts, eroding cross-subsidisation within traditional schemes which has arguably lead to the financial demise of certain medical aids.
- 2) Adrian Gore (Discovery Health): Gore's view is that it will become increasingly difficult to marry the legislative requirements of community ratings and open enrollment with risk management. Yet it is only with more refined risk management tools that medical schemes can ensure their survival in future.

*(d) Discussion of results*

The conventional method of risk pooling based on income tables, followed by a community rating founded primarily on claims history, can barely be termed "risk identification. An individual's income bracket is not reflective of the underlying risk. Yet as much as 86 percent of the sample still rate this method as their primary risk identification tool. One could go so far as to say that historically medical schemes have not identified risks. Risk pooling is merely a form of diversification to ensure a more predictable outcome. Having said that 57 percent of the sample did say that the medical scheme the represented had or were in the process of launching products that identifying risks based on age tables and number of dependants, referring more specifically to medical savings accounts.

On the question of assessing future risks, the medical aid industry in South Africa still has a long road ahead.

8.1.4 RISK EVALUATION

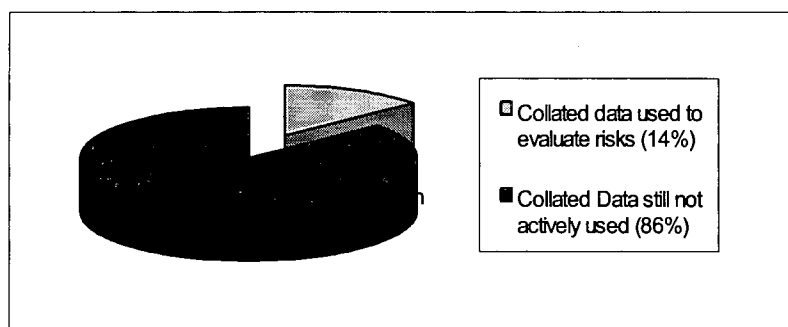
- |                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• "Which tools are used to evaluate risks?"</li><li>• To what use do you put collated data?"</li></ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------|

*(a) Schemes contacted as part of sample survey*



After pooling risk groups, the community rating is based on (a) the groups size and (b) historic claim experience. Medical funders would then underwrite the risk. It has only been in the past few years that the new generation schemes i.e. 4 out of the 7, have started to assimilate claims patterns data.

**Graph 8.1 : Data Collation and Analysis**



As reflected in graph 8.1, only 14% of interviewees responded positively to actively using claims pattern data to evaluate future risks.

*(b) Managed Healthcare participants*

The managed care population is investing significantly in information technology. Examples of investment in IT by medical funders include:

- Healthcare Management Services has, together with IBM, implemented a general benefit management system. They have invested in state of the art equipment and improved pharmaceutical utilization management software. Some of the key features include on-line adjudication of prescription, connection to doctors and paperless processing.
- Medscheme has traditionally run old, unsophisticated claims processing systems. The transformation process has been expensive and challenging. The group has made significant investment in IT systems, it is now at a stage where the systems are able to support a fully integrated managed healthcare service. The claims administration, pharmaceutical/hospital utilization and disease management operations are all linked and able to communicate.
- Norwich has sourced IT both locally and internationally at an estimated budget of R20 million (Heymans 1997:22).
- Sanlam spent substantial amounts on local and international software but then struggled to integrate all the components of the system. The claims processing also proved to be inadequate and are being upgraded to cope with the workload.

These investments in information technology will result in the gathering of vital medical data which the industry needs to understand and evaluate future risk and manage the health delivery process.

*(c) Additional views emanating from interviews*

1. Graham Anderson, chief executive officer of Southern Health says: “Managing healthcare costs is all about information and we have diagnostic and procedural information which is telling a story. With this information, I believe we are going to be able to significantly influence the cost trends downwards over the next couple of years. We’ve analysed our information and are busy pinpointing areas of high cost utilization, such as low back pain, the caesarean section rate and the high cost of treating pneumonia. We are also getting information on disease, which is enabling us to implement our disease-management tools. We are also starting to collate invaluable information about the provider groups – and disseminating it to our provider groups so they can see how profiles compare to their peers. In addition, increased information about patients is enabling us to identify those patients that need closer management, so that we can implement these disease management tools

in treating patients who are incurring high costs as a result of mismanagement of their chronic situation”.

2. Reg Magennis, managing director of Medscheme’s Managed Care division says: “ Our company makes a positive contribution towards enhancing the quality of care by monitoring care against best practice clinical norm developed from claims data.” He believes that data and information are a critical success factor for managed care world-wide. Medscheme’s data warehouse is South Africa’s most extensive repository of health-care claims and information

*(d) Discussion of results*

The information technology infrastructure across the health channels in South Africa is still inadequate to enable broader risk management strategies, as reflected in graph 8.1.4 where only 14 percent of the sample population were actively using collate data to evaluate risks. A case in point is that of processing pharmaceutical prescription claims: South African clearing-houses are still using the very limiting retrospective claims processing. Mediscore Pharmaceutical Benefit Managers (a wholly owned subsidiary of SA Druggist) is in the process of introducing South Africa’s first fully integrated on-line transaction processing point-of-sale pharmacy benefit system. Only once the system is fully operational will pharmacists and

medical aids be able to implement formularies and conduct concurrent utilization reviews.

The study concluded that medical schemes in South Africa do not sufficiently evaluate risks.

Medical aids are increasingly investing in IT systems, empowering them to better capture and then analyse occurrence data. These tools will enable medical schemes to better evaluate risks, empowering them to put in place the necessary risk control measures to ensure future viability.

A significant differentiator between the managed healthcare population and the sample population is that the former has invested significantly in Information Technology (IT) in the recent years. The fruits of which will come from the collating and analysing of data with data warehousing tools. Information will empower the funders to understand, identify, analyse and control risks better.

#### 8.1.5 RISK TREATMENT

##### ***8.1.5.1 Risk Control***

|                                                         |
|---------------------------------------------------------|
| "Do you apply the risk control technique of avoidance?" |
|---------------------------------------------------------|

Do you practice risk reduction through claims management?"

*(a) Schemes contacted as part of sample survey*

Historically medical aids have been loath to turn down applicants and would take on both the sick as well as the healthy and price premiums accordingly. The sample survey confirms this with not one scheme saying it practices risk avoidance.

All of the sample schemes implemented cost control measures by way of claims management. Only 14 percent monitored quality too, the balance, 86%, did not give clear intention to follow a more comprehensive embrace of health care to the extent of actively monitoring quality of service.

*(b) Managed Healthcare participants*

Similar to the sample this population too has not practiced risk avoidance.

Each managed care player has progressed beyond the passive roll of retrospective claims management. Pre-authorisation and increasingly clinical intervention i.e. case management or utilization management is helping the managed care players to control risks.

*(c) Additional comments emanating from interviews*

The following comments emanate from one of the interviews:

The Medical Scheme Act of 1967 inhibited cost controls historically by disallowing managed health and guaranteeing payments. Amendments to the Medical Schemes Act in 1989 and 1993 removed many legal obstacles to the development of managed health care in the private sector. In particular the guarantee of payments to providers has been removed, allowing schemes to refuse to pay for treatment deemed unnecessary. In addition, the amended Act gives freedom to medical scheme and insurers to create “limited” medical cover packages, replacing legislation which specified which benefits must be included. At the same time the South African Medical and Dental Council has removed previous prohibitions on collaboration between providers and insurers, thereby allowing the formation of managed health care schemes.

*(d) Discussion of results*

Claims management is the most common form of risk control. Given that claims management is retrospective in nature it very rarely empowered the medical aid to monitor or intervene in the healthcare delivery process. Retrospective reviews i.e. claims management, are no

longer sufficient in controlling risks. In order to identify potential future risks and control current risks better it is imperative that medical schemes become more proactive and invest more resources on how data capturing and mining. It is only with information that medical schemes can employ active pre-authorisation and case management.

#### *8.1.5.2 Risk Financing*

- "Which remuneration system do you use?"
- Do you envisage a change in the remuneration system in future?
- How do you provide for costs: retention or reinsurance?"

*(a) Schemes contacted as part of sample survey*

### **Graph 8.2 : Modes of remuneration across the sample**



recommended by the Registrar of Medical Schemes and 43 percent of the sampled population took out reinsurance.

*(b) Managed Healthcare participants*

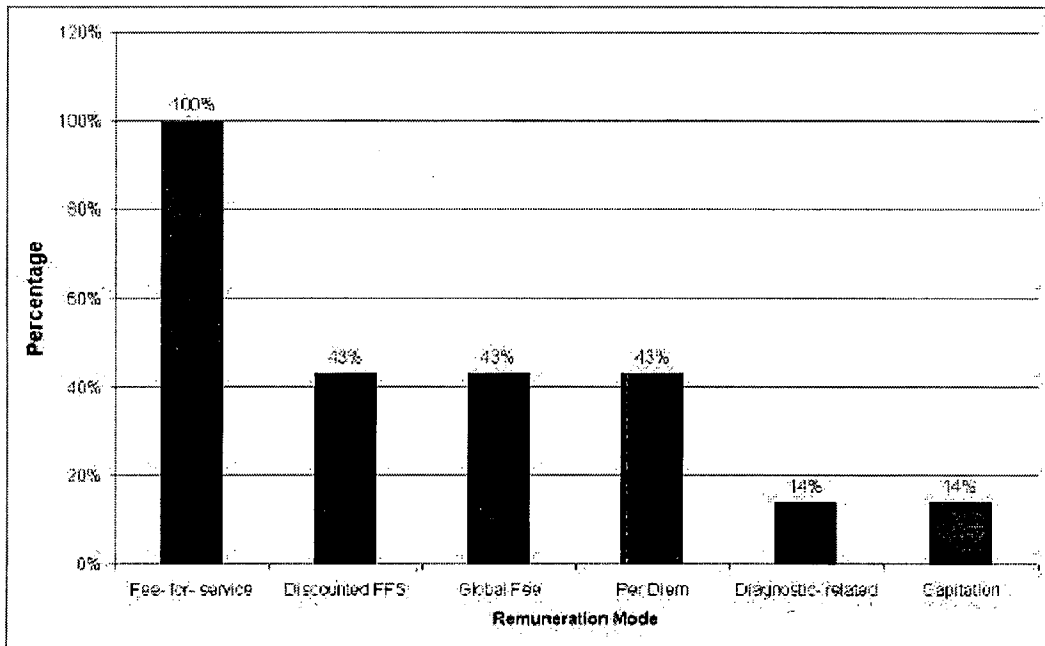
- These schemes should, by definition, make a more aggressive move towards risk sharing with health care providers, yet the spread of remuneration methods, from fee-for-service to capitation, is similar to that of the sample population. At the extreme of the spectrum would be capitation but this is still far off, even for managed care implementers, with perhaps the exception of Medimo,<sup>32</sup> the consequence of which was liquidation.
- As with the sample population, costs are predominantly addressed on a pay as you go basis out of reserves.

*c) Discussion of results*

It is becoming clear to the decision makers in the industry that applying fee-for-service as the main remuneration method does very little to aid the medical aid industry to manage risks. With fee-for-service all the claims are reviewed in retrospect with little scope for retribution.

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<sup>32</sup> Refer to Chapter 7, company profile for more detail.



- As reflected in graph 8.2 fee-for-service, historically the more prevalent remuneration mode, still dominates with every scheme still catering for it. However all the interviewees envisaged a stronger move towards risk sharing with providers in future via either global fees, per diem rates (where 43% of the sample had started implementing these tools) or even capitation at the extreme (as reflected by the 14% penetration).

On the question of providing for costs, the funding of risk seems quite similar across the board. Costs have been predominantly addressed on a pay-as-you go basis, out of reserves. Each medical aid having set reserves as

Increasingly schemes will look at more sophisticated modes of remuneration, which enable the medical aid to play a more value added role in health care delivery and will make service providers share more risk and become more accountable for the level of care they are delivering.

## 8.2 HEALTH CARE OPTIONS

### 8.2.1 CO-INSURANCE PLANS?

"Have you implemented/explored co-payment plans?  
Do you believe that co-payment: reduces moral hazard,  
increases the consumer's sensitivity to the true cost of the  
care?"

#### *(a) Schemes contacted as part of sample survey*

Co-insurance schemes did not prove popular. Only one scheme included a 30 percent co-insurance on all products and another added a 10 percent co-payment if the member used an out-of-network provider.

100 percent of the schemes interviewed were of the opinion that co-insurance make the consumer more sensitive to health care costs but it was not ideally effective due to the fact that co-insurance is not paid at the point of service but rather billed at the end of the month.

#### *(b) Managed Healthcare participants*

Managed care players do not view co-insurance plans as vital in managing the health care process, which is about more than just cost savings. Yet one scheme, Southern Health, enforces a surcharge if members on the managed

care program do not refrain from drugs outside the formulary.

*(c) Additional views emanating from interviews*

Three of the interviewees expressed that co-insurance achieved, more than anything else, the goal of short-term cost savings.

*(d) Discussion of results*

Co-insurance is viewed as a short term, cost saving scheme. It does little in the way of controlling or managing risk.

## 8.2.2 BONUS AND/OR REBATE OPTIONS

*“Do you implement bonus or rebate options?”*

*(a) Schemes contacted as part of sample survey.*

Only one scheme interviewed offered a no-claim bonus. Yet the relative size of the bonus i.e. 0.4 percent of total claims paid rendered the bonus meaningless.

*(b) Managed Healthcare participants*

Bonus and rebates are uncommon in managed care.

*(c) Additional views emanating from interviews*

1. Bafana Nkosi from Bonitas highlights that pending legislation will render this alternative null and void. As a result bonus options will in future play an even smaller role in the risk management process.

*(d) Discussion of results*

As with co-payment plans, bonus options were not viewed as vital in monitoring the appropriateness of long-term health care delivery. It is viewed as a short term, cost saving scheme.

### 8.2.3 MEDICAL SAVINGS ACCOUNTS

- "Do you offer the option of medical savings accounts?"
- What would you consider to be the positives or negatives to this structure?"

*(a) Schemes contacted as part of sample survey*

Of the population surveyed 71 percent offered medical savings accounts. The market for new generation funds, offering medical savings accounts, is estimated to be as large as the life assurance market, and growing at more than 25 percent per annum.

The second question on pros and cons is addressed comprehensively under point (c): additional views emanating from the interviews.

*(b) Managed Healthcare participants*

The managed care population still view saving accounts as important in managing risks. A majority of this populations business still emanates from this model.

Only one scheme concurred with literature<sup>33</sup> in downplaying the significance of savings accounts ability to manage long term appropriateness of care i.e. future risks.

*(c) Additional views emanating from interviews*

1. Bafana Nkosi of Bonitas highlighted that in Medschemes experience, savings accounts have not been very popular with the lower income black markets.

Medical savings accounts have been purely understood by the lower income groups. As a result insurance companies are now starting to introduce “Nurseline”

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<sup>33</sup> A report by Hollandia Reinsurance on managed care says the proponents of managed care and medical savings account schemes appear to be diametrically opposed.

to assist medical savings scheme members with their healthcare decision.

2. Another interviewee believed that savings accounts certainly provided an incentive to abstain from unnecessary out-of-hospital care as the consumer has to pay the bill once a certain threshold has been breached. This invariably has its downfalls such as the longer-term health consequence of not using preventative as opposed to curative measures.
3. Dave Avnit, Executive Chairman of Fedsure Health believes that MSA were perhaps the medical aids first attempt at properly addressing risk management. “Proof of the viability of savings accounts, given the risk management tools implemented, is the fact that major new generation funds such as Fedhealth and Momentum were able to grow exponentially and yet remain profitable. Unlike traditional schemes who after a period of enormous growth ran into losses, necessitating consolidation”.

Health insurers have been accused of cherry picking the young and healthy and the cause of further deterioration of the financial position of medical schemes. The government has, however, acknowledged that these schemes have a role to play



in the primary healthcare environment, but the tax benefits associated with these schemes are likely to change. Contributions to the schemes will probably remain tax deductible, but the interest earned on the savings will be taxable.

Avnit goes on to say that companies focused purely on MSA might find their profits plateauing soon if the government regulates the industry further as envisaged by the white paper.

4. Dan Pienaar of Liberty Health says that the use of risk-management principles in insurance-based products is an effective way of containing contribution increases. Given that new generation products are based on effective risk management principles, the risk of the young and healthy members carrying a disproportionate contribution is avoided.

*(d) Discussion of results*

Medical savings accounts are conceptually sound in that they are designed to encourage members to be more accountable for everyday care. With medical savings accounts contributions are based on age and gender, which

are better indicators of risk than salary. Having said this, literature does question the ability of savings accounts to manage long-term appropriateness of care<sup>34</sup>.

## **8.2 DOES YOUR ORGANISATION PURSUE CASE-MANAGEMENT/ UTILIZATION MANAGEMENT?**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• "Is each claim reviewed?</li><li>• Who reviews the claims?</li><li>• Are the information technology systems sufficient to capture claims patterns and communicate with doctors and monitor provision of care?</li><li>• Are these claims patterns used to assess future risks?</li><li>• Do you have protocols for each disease?</li><li>• Do you work off a drug formulary?"</li></ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

*(a) Schemes contacted as part of sample survey*

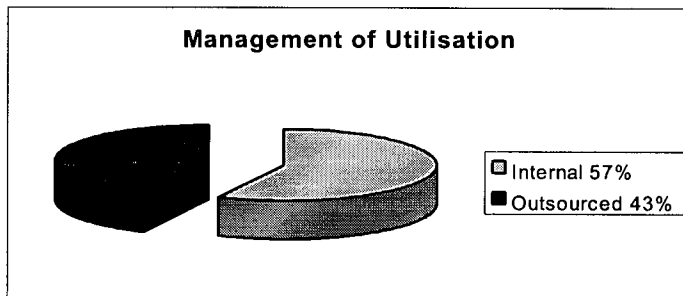
- All of the sample population funds pursue some form of case management to assure objective considerations of appropriateness of admission, length of stay and timeliness of professional and ancillary services.

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<sup>34</sup> A report by Hollandia Reinsurance on managed care says the proponents of managed care and medical savings account schemes appear to be diametrically opposed

However only 14 percent manage all cases from a general practitioner level through to hospital care.

**Graph 8.3: Utilization Management**

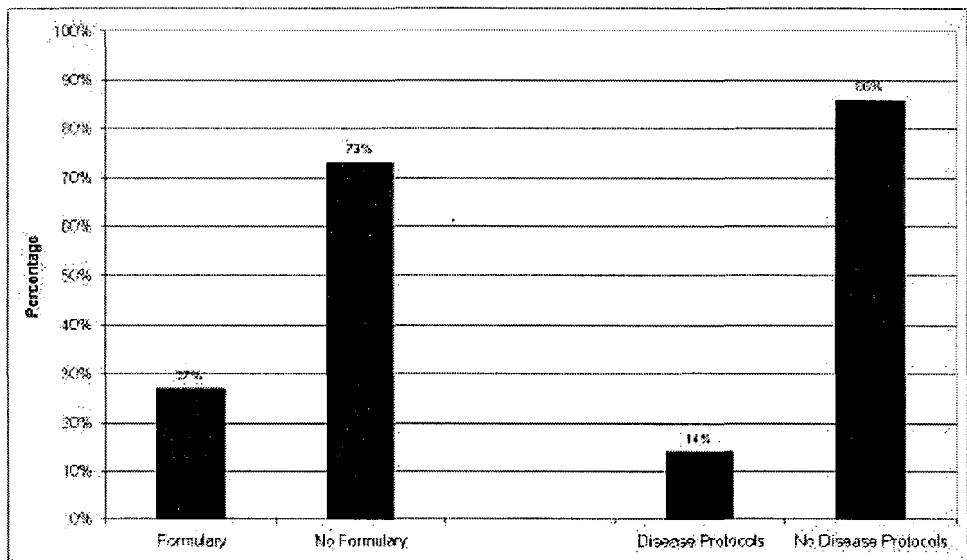


As reflected in Graph 8.3 , 43 percent of funds outsource utilization/case management and receive statistics on a monthly or quarterly basis.

- In all the cases the case managers comprised nurses or sister with the added consultation of a doctor or specialist where required.
- All the sample candidates considered IT systems in the industry as sufficient to capture claims patterns and communicate with doctors and monitor provision of care.
- Only 14 percent of the sample population actively mine data to identify potential future risks.

- It is clear from Graph 8.4 (below) that the industry has embraced the concept of formularies with as much as nearly 30 percent of the sample population making use of formularies. Disease protocols, on the other hand, have not been sufficiently addressed with only 14 percent of the sample responding positively to the question.

**Graph 8.4: Formulary and disease protocols**



*(b) Managed Healthcare participants*

- Managed care players apply case management with internal resources as apposed to outsourcing this task. But even with the managed care population reviews are confined to reviews

of hospitals and or abnormal claims as opposed to monitoring the whole health delivery chain.

- Managed care players place more importance on formularies and disease protocols. Formularies are now a de facto standard and much effort is currently being placed on developing disease protocols.

*d) Discussion of results*

- Even though all of the sample population say they do pursue case management, further discussion lead to the conclusion that majority use the terms case management and claims management interchangeably, which is not correct.
- It is also important to note that only 14 percent manage all cases from a general practitioner through to hospital care. Therefore not all cases are managed.
- The fact that no one considered their investment in information technology as insufficient should be treated with circumspect given that it is only in 1998 that a funder, for the first time, can trail drug treatment by any one patient by a multitude of health care providers with the aid of Mediscor's Pharmaceutical Benefit Management.

This view is also in contradiction to the result as shown in 8.4.1 where only 15 percent of the sample were collating data to use in evaluating risks. Information technology is a necessity in collating data.

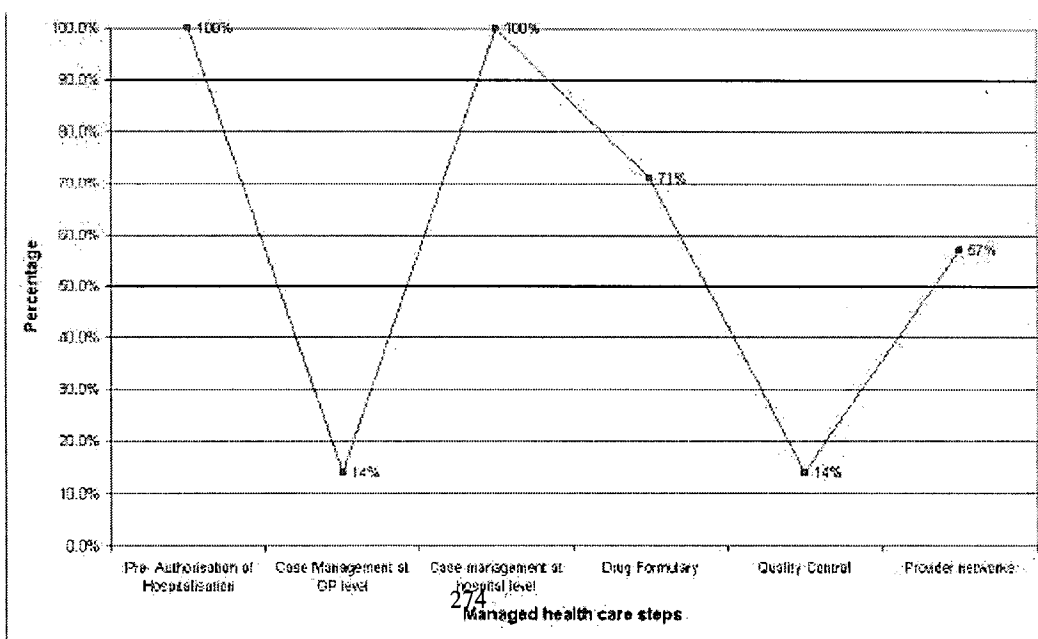
### 8.4 MANAGED CARE

"What active steps towards managed health care has the organisation already taken example:

- Pre-authorization of hospitalisation,
- Case management;
- Drug review
- Quality of health delivery control;
- Preferred provider status with any specific hospital network or doctor organisation?"

(a) Schemes contacted as part of sample survey

**Graph 8.5 : Managed Health Care steps implemented by Medical**



As shown in graph 8.5 , pre-authorisation of hospital care and case management at hospital level are now conducted across the sample population. It is only in the areas of case management at the general practitioner level and quality control (both scoring 14 percent compliance) that the sample group is sorely lacking.

Preferred provider networks are increasingly becoming the norm with 57 percent of the sample having appointed such networks.

Even though only 30 percent of the sample were actively using formularies, as much as 71 percent had taken steps towards putting formularies in place.

*(b) Managed healthcare participants*

Each of the funders in this population currently pre-authorise hospital care, case manage at the hospital level and work off drug formularies. Selecting preferred provider networks have become standard practice. Even managed care players have not mastered case management at the GP level, with exception to one fund. The control of quality of delivered health care is still not an achievable goal.

*(c) Additional comments emanating from interviews*

- (1) The managed care players such as Southern and Sanlam, who signed preferred hospital provider contracts faced much pressure from doctor groups, hospital groups and the Competition Board until they opened their network to all hospitals willing to abide by their terms. The lesson learnt by all the medical aid players is that health care providers still carry much weight in this country unlike the scenario in the United States where the level of provider over-capacity rendered the funder in a stronger position. As a result managed health disciplines will be more difficult to enforce on providers in South Africa.
  
- (2) Graham Anderson of Southern Health says on provider networks: “This is important because our provider network is the source of our information. If we don’t know that a patient is accessing the system, that he or she is seeing a specialist, being admitted into hospital or undergoing major surgery until such time as the account lands on our desk, we haven’t a hope in effectively managing that cost”.



- (3) Service providers have experienced difficulty in complying with ICD10<sup>35</sup> and CTP4 coding systems, which Southern Health was the first to introduce.

*(d) Discussion of results*

From the outcomes of the sample survey it is clear that medical aids are making inroads towards managed care by implementing the first phases i.e. pre-authorisation of hospital care and case management at the hospital level. Only 14 percent of the sample, however, believe as theory imparts, that management of health care is a long-term process which necessitates an understanding of the continuum of health care services, and that the consumer needs to be monitored and managed throughout this continuum.

Despite a unanimous acceptance from the interviewees of managed care in principle, its introduction is proceeding slower than anticipated, with many testing the water first with certain managed care tools. Given that hospitalisation and drug costs comprise by far the biggest component of the national health bill i.e. 75,4 percent (Registrar of Medical Schemes 1994:11), it is these elements that are receiving the greatest scrutiny.

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<sup>35</sup> These codes refer to procedures and diagnosis which providers must supply to be inputted into the database

#### 8.4.1 BARRIERS TO IMPLEMENTATION OF MANAGED CARE

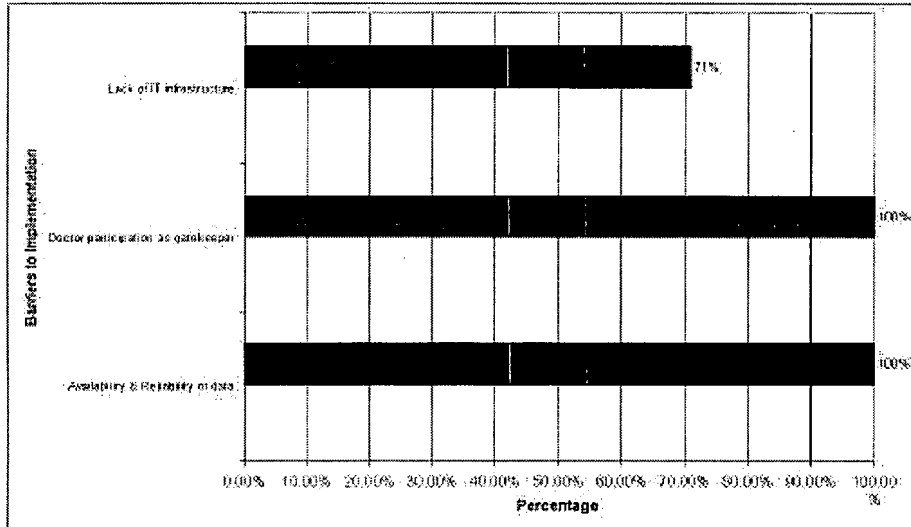
"What are the barriers to implementation of managed health care

- Availability and reliability of data
- Doctor participation as gatekeeper
- Information systems across the entire health continuum"

*(a) Schemes contacted as part of sample*

The sample schemes were asked to rate what they considered to be the barriers to implementation of managed care in South Africa. The outcomes are depicted in graph 8.6. on the following page.

**Graph 8.6: Barriers to Implementation**



All of the Medical Aids in the sample voted that collecting data was a problem as was the role of the general practitioner in the whole process. Only 28% considered the information systems in the industry as sufficient to handle the process of managed care.

*(b) Managed healthcare participants*

Other problems to implementation cited by those that have attempted to implement managed care where:

- Resistance from service providers and medical aid members. Providers have not been sufficiently educated on what the role of gatekeeper encompasses.

- Non-compliance by beneficiaries with the general rules and regulations set by the managed care companies;
- A lack of formal representatives of service providers (especially specialists) with whom managed care companies can negotiate;
- A service provider system that is unable to cope with new reimbursement methods such as per diem fees; global fees and capitation.

*(c) Additional comments emanating from interviews*

Adrian Gore of Discovery Health sights the largest difference between the United States' health system and South Africa's is the formers oversupply of doctors.

| Specialisation       | USA - Patients per Doctor | South Africa - Patients per doctor |
|----------------------|---------------------------|------------------------------------|
| Surgeons             | 1000                      | 23000                              |
| Paeditritions        | 8000                      | 33000                              |
| Gynaecologists       | 15000                     | 8000                               |
| Psychiatrists        | 32000                     | 6000                               |
| Orthopaedic Surgeons | 20000                     | 16000                              |

Source : Discovery Health

Gore is of the belief that managed healthcare relies on an oversupply on doctors. Given the laws of supply and demand, medical schemes are then in a better position to negotiate discounts.

He envisages a more South Africa centric managed healthcare model termed integrated care, which entails a move away from traditional fee-for-service to a more PPP, savings accounts model.

He goes on to say that South Africans, in general, tend to use health care services more liberally and do not take well to being told which doctor to visit i.e. in terms of preferred provider networks.

*(d) Discussion of results*

The medical industry in South Africa, very clearly have some stumbling blocks to address before the implementation of broader managed care principles is made possible. This includes educating both the health care fraternity as well as members of the population about the issues involved. The gatekeeper role is vital as it is the point of first entry in the health service chain. Yet doctors need to be better educated on the significance of the role and consequences of their actions.

The industry further requires a significant investment in information technology in order to collate data, to facilitate service provider reviews and to cope with the various reimbursement methods. One could very well envisage a more "South African centric" model. The bottom line

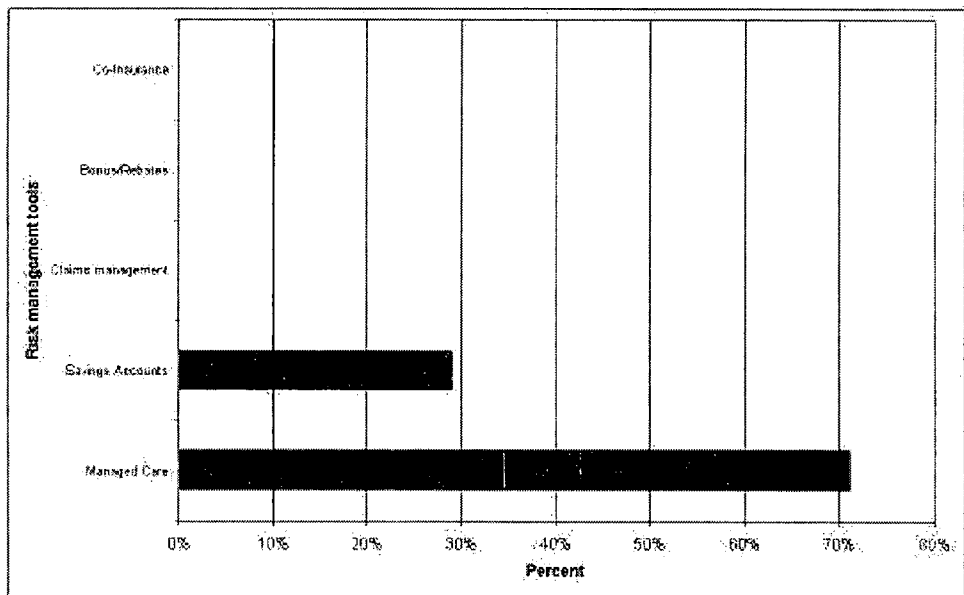
though is that any move towards a more managed/co-ordinated health care industry is a move in the right direction.

### 8.5 ALTERNATIVE SCHEMES

"Rate which alternative your schemes considers superior in addressing risk management in health care funding "

(a) Schemes contacted as part of the sample

**Graph 8.7: Superior Tools for Risk Management**



As reflected on graph 8.7, 71 percent of the sample population rated managed care as the superior risk management tool in funding health care. This was followed by close of 30 percent that felt medical savings accounts were still the better tool in managing risks

*(b) Managed healthcare participants*

The managed care population are protagonists of the managed health care models to better manage risks.

*(c) Discussion of results*

This question attempted to gauge, which systems each funder considered to be the better in terms of dealing with risk. Even though more schemes in South Africa are currently employing medical savings accounts versus comprehensive managed care programmes, the desired balance appears to be reversed, with the majority siting managed care as the better tool. Going forward one would expect the industry to increasingly move towards a managed care model.

**8.6 RESULTS OF IMPLEMENTED PROGRAMMES THUS FAR:**

*None of the sampled schemes were able (willing) to divulge results of managed care modules to date. For the purpose of illustrating the short term benefits of managed care, this section will review data provided by four managed care players i.e. QA Care, Qualsa, Sanlam, and Medcheme.*

**8.7.1 QA Care**

QA Care<sup>36</sup> is responsible for the management of eight medical schemes' utilization management. It has posted some impressive improvements in health care costs in the past year. QA Care imparted with data outcomes for one scheme, scheme A.

**Table 8.6.1: Results of Hospital Utilization Management of Medical Scheme**

**A**

|                       | <b>1997</b> | <b>1998</b> | <b>%</b> |
|-----------------------|-------------|-------------|----------|
| Cost per Case         | R4031       | R3360       | (16)     |
| Length of Stay        | 2.6 days    | 2.2 days    | (15)     |
| Cost per hospital day | R1513       | R1654       | 8        |

<sup>36</sup> QA Care is a hospital utilization management company, responsible for the management of hospital costs for medical schemes. QA Care has been active in utilisation management since April 1995. It has been in existence for 4 years, employs 50 sister and a total staff compliment of 65. It also has a team of consultants paid on a retainer basis. QA Care has 100 000 beneficiaries.



As depicted in table 8.6.1 this utilization management company, QA Care, was successful in managing this particular scheme's cost per case down by 16%. One would expect this to be a function of the length of stay, which in this case was reduced by 15%. Yet the cost per hospital day increased by 8%, which could be a reflection of the types of cases being administered or the severity of the treatment given in the shorter stays.

The number of cases that were disallowed by QA Care across five schemes is presented in table 8.6.2.

**Table 8.6.2: Cases disallowed by QA Care across five schemes**

| <b>STATISTICS ON NOT AUTHORISED CASES DISALLOWED PER SCHEME.</b> |                       |                                                      |                                                       |
|------------------------------------------------------------------|-----------------------|------------------------------------------------------|-------------------------------------------------------|
| <b>Scheme</b>                                                    | <b>Period</b>         | <b>Principal members where cases were disallowed</b> | <b>Estimated Rand amount saved on hospitalisation</b> |
| Scheme A                                                         | Jan 1998 – May 1998   | 2485                                                 | R 200,000                                             |
| Scheme I                                                         | Jan 1997 – May 1998   | 2284                                                 | R 325,250                                             |
| Scheme C                                                         | Jan – Dec 1997        | 22653                                                | R 1,884,650                                           |
| Scheme S                                                         | Jan – Dec 1997        | 1711                                                 | R 165,650                                             |
| Scheme P                                                         | March 1997 – May 1998 | 1111                                                 | R 193,600                                             |

Source: QA Care

The above cases were not authorised mainly due to inappropriate facility i.e. a dental procedure that can be done at the dentists rooms rather than in hospital. The above rand amount is the estimated cost for hospitalisation only and excludes associated costs i.e. pathology and radiology. The amounts reflected accounted for approximately a 40 percent total saving to the scheme, which would have gone undetected had it not been for case management.

#### 8.6.2 QUALSA

After 16 months of operation, Qualsa has demonstrated the following cost savings:

- 7 percent on admission management;
- 20 - 40 percent on medical and surgical case management;
- 35 percent on pre-natal management;
- 30 percent on mental health management and
- 30 percent on claims auditing.

#### 8.6.3 SANLAM

Since introducing managed care in July 1996, Sanlam Health Care reported a 30 percent drop in magnetic resource imaging scans, saving R1,2 million annually which has been given back to the 1 million covered by its managed care scheme. The average length of hospital stays dropped from 2,9 to 2,4 days

i.e. 17 percent. Hospital admission rates dropped from 275 per thousand members to 240, and bed days from 840 to below 750 per thousand. The average length of hospital stay for births dropped from 3,5 to 2,9 days and for caesarean section from 4,7 to 4,6 days.

Sanlam Health rejected authorisation for more than 700 operations, which it deemed, were unnecessary : “This was done after proper medical evaluation, and no emergency cases were affected.”

“Since we introduced managed health care the result has been more cost-effective health care for all our members, with no sacrifice in quality. This then translates into lower premium increases and better access to quality care for more South Africans” says Dr Hofman of Sanlam Health.

Sanlam’s medical advice line received 1 500 calls in its first month, 557 of whom decided against visiting their general practitioner after receiving phone advice.

#### 8.6.4 MEDSCHEME

Dr Rothberg, MD of Hospi-Serve the utilization management division of Medscheme, says that its introduction saw a radical shift from the old reliance on retrospective review of hospitalisation (account audit/claims management) to

concurrent review (case management) and prospective review (pre-authorisation). In the early stages of hospital benefit management service, proven savings of between 4 percent and 10 percent was reported. Hospital days have been managed from 3,2 days to 2,6 days. Medscheme believes that after contracting with hospitals it can now achieve better savings due to improved communication, pre-notification, discounts and a lower cost per case.

Other services include an on-line member and doctor profiling facility for the medical aids. High claiming patterns are counselled by nurses, who in turn contact or visit the respective physicians. The group will go so far as to ask for a reimbursement by the doctor. The provision of these services has resulted in a saving of more than R40m during 1997.

## 8.7 Views on Draft Policy on Financing of Health Care Policy in South Africa

"How will the pending legislation, with respect to community rating, impact the industry at large and its ability to manage risk?"

### *(a) Schemes contacted as part of sample*

All sample members agree that the introduction of community rating<sup>37</sup> will hamper risk identification and evaluation. It will further impact those schemes offering medical savings account given their reliance on more member specific information to rate individual risk, as opposed to the cross-subsidised model applied in community rating.

### *(b) Managed Healthcare participants*

The view from a prominent chief executive officer at a managed healthcare organisation is that the introduction of community rating, open enrolment and minimum benefits effectively removes the power of pricing. His view is that one will not be able to simply link price with risk as was the case historically hence the risk management techniques must become more refined.

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<sup>37</sup> The concept of community rating as intended by the bill (but not properly worded as such) is that medical scheme contributions may only be raised on the basis of family size and income.

(c) Additional comments emanating from interviews

1. There are three concepts that give rise to the greatest problems (Dr Brian Brink, senior medical consultant at Anglo American):

- 1.1 The inclusion of all immediate family members living in the same household as ordinary dependants will significantly increase the costs of the scheme without an appropriate and corresponding increase in contributions to be paid by the member concerned.

- 1.2 The bill does not allow for differentiation between adult and child dependants in the determination of contribution, or differentiation on the basis of age. High cost individuals such as females of child-bearing age and grandparents will be entitled to membership at the same rate as all other dependants – normally children.

The average cost of dependant membership will increase dramatically for all members. The winners will be those with extended families, the losers with small families will presumably leave the medical scheme when they realise that the cross-subsidy they are required to pay is too onerous. In time, the winners will also become losers.

1.3 The bill provides that no limitation will apply to the payment of any relevant health service obtained by a member from a public hospital. This in effect legislates guaranteed payment for any service rendered by a public hospital at whatever prices the state chooses to charge. It can be expected that public hospitals will exploit this provision to raise additional revenue outside of their normal budgetary constraints.

2. The likely outcome of the regulation is that young members will withdraw from medical schemes because of the high costs and only rejoin when they anticipate high medical expenditure, knowing that they must be accepted. While there may be some protection in measures designed to reduce anti-selection, such as waiting periods, these are unlikely to contain the inevitable rise in costs to the remaining membership.

The cost spiral so created will drive more low claiming members out of medical schemes, thus defeating the object of expanding access to private health care cover for more people.

3. A further concern is that enforced community rating will aggravate the situation with regard to unfunded post-retirement liabilities. New accounting standards require employers to declare these unfunded liabilities on their

balance sheets. The amounts of money involved are staggering. Any employer that has promised to pay a proportion of the medical scheme contribution will be exposed to increased and unmanageable cross-subsidy liability for post-retirement medical costs as a result of enforced community rating.

The provision for minimum benefits being not less than benefits provided for by public hospitals will undoubtedly increase costs for many schemes serving low-income earners. Low-cost schemes will typically have to remove any limits they might have on hospital benefits. Then they will no longer be low cost schemes.

*d) Discussion of results*

The combination of the three factors referred in point 1 above, is bound to raise the cost of medical scheme membership beyond affordable levels for employers and for average employees. The inevitable result will be that employers will change their basis of funding healthcare from a defined benefit promise towards a defined contribution, which will only escalate at the rate of salary increases.

Hence employees, including the millions of trade union members, will bear the major brunt of the increased costs.



The funding system will rely on a large cross-subsidy from young to old. The concept can only work if it is underpinned by a constant influx of young members, who are prepared to contribute substantially more than they claim.

Such community rating usually requires a compulsory membership environment to ensure that there is an adequate supply of young members. However, the bill specifically provides for voluntary membership (open enrolment) coupled with guaranteed access, regardless of state of health, for all individuals applying to join a medical scheme.

Adrian Gore (Discovery Health) probably summarized it best by highlighting his views on health care funding trends which are (Presentation to University of the Witwatersrand Alumni July 1999):

- (1) Size and risk management capabilities will be more important.
- (2) A move away from traditional managed care towards integrated care.
- (3) A move from paying for sickness to incentivising wellness.
- (4) Increased expenditure on information technology.

- (5) The increased importance of intermediaries as agents of change.

## **8.8 SUMMARY**

Even though the sample population unanimously affirmed that they implemented risk management tools it was clear from the more specific questions that medical schemes in South Africa have implemented the most rudimentary of risk management strategies. The analysis revealed that the medical schemes did not identify, nor did they evaluate or control risks.

The information technology infrastructure across the health channel in South Africa is still inadequate to allow for broader risk management strategies. Only 14 percent of the sample collated and mined diagnostic data to identify and evaluate risks.

Claims management is the standard when it comes to risk control yet claims management is in retrospect and offers limited recourse. The same logic applies to the most common form of remuneration technique i.e. fee-for-service. Increasingly, however, schemes will look to more sophisticated remuneration methods where healthcare service providers become more accountable for the quality of healthcare they deliver.

Of the alternative healthcare options, both co-insurance and bonuses proved unpopular but medical savings accounts was ranked the highest in terms of schemes that had implemented new generation

products and ranked second, after managed health, as the better tool for managing risks.

Even though managed healthcare ranked first as the best strategy for an all encompassing risk management programme in healthcare it was clear that medical aids are still making inroads towards managed care by implementing the first phases i.e. pre-authorisation of hospital care and case management at the hospital level. Only 14 percent of the sample, however, believe as theory imparts, that management of health care is a long- term process which necessitates an understanding of the continuum of health care services, and that the consumer needs to be monitored and managed throughout this continuum.

The new legislation on community rating and open enrolment will lead to less short-term risk identification and evaluation abilities but will necessitate more acute longer-term risk identification , evaluation and risk financing methodologies.

## **CHAPTER 9: CONCLUSION AND RECOMMENDATIONS**

### **9.0 INTRODUCTION**

As a consequence of the consistently spiralling healthcare costs in South Africa, healthcare has become increasingly unaffordable. Due to the very nature of the medical insurance industry in South Africa, the success of a medical scheme is largely determined by the measure to which the increasing number of high risk categories (aged and infirmed) are

subsidized by an increasing number of young and healthy. Yet the cost pressures have placed restraints on a medical aid's ability to obtain new membership and has resulted in losses for many schemes. This has called into question the role of risk management in the medical aid industry historically and its role going forward.

The primary objective of this research was to determine to what extent risk management has been implemented in the South African medical aid industry.

The secondary objective was to evaluate alternative health care risk management strategies with the purpose of identifying the most appropriate strategy.

## **9.1 RISK MANAGEMENT**

Through the disciplines of risk management an organisation is able to predict and control the effect of future events on its operations. Risk management is concerned with identifying, evaluation, controlling and financing risks.

Medical schemes face a number of challenges to secure their future role and long-term sustainability. They are under pressure to curb the continued cost spiral which is *inter alias* ascribed to an uncontrolled fee-for-service reimbursement method and lack of suitable methods to address unacceptable claims and practice profiles.

The findings of the study was that that the South African medical aid industry has not adhered to the broader definition of risk management as theory prescribes. The results of the study revealed that medical schemes in South Africa have applied the most rudimentary risk management strategies.

The full extent of risk management was one of risk pooling and risk financing. Yet risk pooling is a diversification process as apposed to a risk control tool, where cross subsidisation helps to ensure a predictable outcome.

A mere 29 percent of the sample dedicate set resources to risk management and have comprehensive risk committees with representation from the health fraternity.

Risk identification in medical schemes is still constrained to risk pooling but steps have been taken to better identifying risks by risk rating based on age and number of dependants as opposed to conventional income tables. By and large the conclusion that can be drawn is that medical aids in South Africa rely heavily on their actuary department to appropriately price risk into premiums. After identifying risks a community rating was historically applied based merely on the group size and historic claims experience.

In future, if some of the pending legislation is promulgated, even the power of risk pricing will come into question.

The full extent of risk control measures in the industry includes retrospective claims reviews. Managed care players have progressed beyond the passive roll of retrospective review with an increasing number of such schemes offering clinical intervention tools such as hospital utilization management.

Even though most medical schemes have made inroads into some form of clinical intervention such as hospital case management it is interesting to note that 43 percent of scheme administrators outsource these tasks. With administrators outsourcing the task of managing utilization it is apparent that the party that assumes risk often does not manage that risk.

The information technology infrastructure across the health channel is still inadequate to allow for broader risk management strategies.

Managed health care players have started making significant investments in technology that will in future empower schemes to mine historic data to identify trends that could lead to identifying and evaluating future risks.

Financing is primarily based on a fee-for-service remuneration method with alternate methods of remuneration, with an increasing amount of risk sharing, becoming increasingly more common. Costs are addressed on a pay-as-you-go basis, out of reserves.

It is clear that the industry is changing. The focus has changed from claims processing to proactive interaction with medical providers and

members in order to better manage the risk. The companies with the greatest chance for survival are those that provide a comprehensive managed care service, have access to large patient volumes, have good information technology and a capital base that allows them to assume risk.

## **9.2 EVALUATION OF ALTERNATE HEALTHCARE STRATEGIES.**

Of the alternative healthcare options, both co-insurance and bonus options proved unpopular but medical savings accounts ranked the most popular in terms of the number of schemes that implemented new generation products. Medical savings accounts however ranked second to managed healthcare as the better strategy for managing healthcare risks.

These new options i.e. co-insurance, rebates etc. created an incentive for the insured to forego medical care in the advent of illness. "Bonus hunger" could conceivably induce insureds to defer or even forgo necessary medical treatment, jeopardising their health. The negative consequences of "bonus hunger" would leave its traces in the patterns of outlay on medical care over time. Specifically, early savings would tend to be wiped out in the later periods.

A crucial issue when managing health care risks is the adjustment of behaviour, which results in a reduced consumption of services. This

should, however, occur in a "managed" manner where medical professionals, as opposed to the consumer, drive the process.

Medical savings accounts are conceptually sound in that they are designed to encourage members to be more accountable for everyday care. With medical savings accounts contributions are based on age and gender, which are better indicators of risk than salary. Having said this, literature does question the ability of savings accounts to manage long-term appropriateness of care<sup>38</sup>.

Of the alternative risk management strategies managed healthcare seems the more appropriate in fulfilling the criteria of risk management. Medical aids in South Africa have not been active in trying to reduce the frequency of loss in the longer term through active involvement in the delivery and quality of health care service. Managed health care provides the tools to address such issues.

Managed healthcare by definition addresses many of the risk management principles as highlighted in this research. It not only deals with identifying and analysing future risks more thoroughly, it also deals with the treatment of risk by looking at healthcare in a holistic manner and exerting control through the full continuum of health care services, from the gatekeeper (general practitioner) level to post-hospital care and claims management.

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<sup>38</sup> A report by Hollandia Reinsurance on managed care says the proponents of managed care and medical savings account schemes appear to be diametrically opposed.



By networking and tying in preferred providers managed healthcare also co-ordinates and rationalises services, hence controlling risks. In a managed care environment it is also easier to research the efficiency and quality of services as provider practices will have to conform with predetermined protocols and utilization of patients services is easier to track.

The research shows that there exists no perfect system for healthcare. Of the options explored in this research, managed healthcare was the only option that fully embraced the concept of risk management. It is only through a more integrated approach that one can build the necessary databases on which to identify and evaluate risks. It is only with clinical intervention that one can monitor and control risks. However finding the more suitable "South African centric" managed care model is the challenge. The medical schemes that attain this milestone face the strongest chance of success.

Bill Gradison, president of Health Insurance Association of America says (Online Forum 1998): "There's no best system. But we believe that the current systems (*managed health care*), with its faults, operates pretty well."

### **9.3 AREAS FOR FURTHER RESEARCH**

Certain barriers to implementation of managed healthcare have been highlighted, some of which provide interesting topics for further

research. In order to attain risk management one needs comprehensive data. South Africa lacks comprehensive medical databases. This impacts risk identification, risk evaluation and risk treatment. The technological infrastructure in the industry is also inadequate to handle this daunting task; e.g. service provider systems are unable to cope with new reimbursement methods, general practitioner desk-top software must integrate with on-line electronic data exchanges.

Therefore a look into the role of technology in risk management is a plausible topic for further research.

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