



**DEVELOPING A RISK BASED REGULATORY APPROACH FOR
THE COUNCIL FOR MEDICALS CHEMES**

**PART 1:
CRITERIA FOR ALLOCATING MEDICAL SCHEMES INTO IMPACT
BANDS**

CONSULTATION PAPER 2 OF 2003

OFFICE OF THE REGISTRAR OF MEDICAL SCHEMES

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THEME: PRIORITISING INTERVENTIONS BY COUNCIL WITHIN A RISK- BASED FRAMEWORK, AS PART OF AN OVERALL STRATEGIC FOCUS

Objective: Development of criteria for allocating schemes to impact bands

Activities: Review of demographic and financial indicators to ensure adequate protection of policy objectives through prioritised interventions

Outputs: A definitive set of criteria for allocation of schemes into high, medium and low impact categories for purposes of monitoring and intervention.

1. INTRODUCTION

1.1. THE RISK BASED (PROBLEM SOLVING) REGULATORY APPROACH

The Council for Medical Schemes has adopted a risk based approach as a key element of its strategic direction. A key implication of this approach is that the Council should tailor its regulatory responses in line with the risks that particular medical schemes pose to our statutory objectives.

The risk based approach we have adopted will have three important parts. Firstly, we will allocate medical schemes to three impact bands, based on our understanding of the impact that a medical scheme is likely to have on our strategic objectives. This impact banding will therefore allow for a more targeted regulatory approach. For example, our regulatory approach to high impact schemes will differ from that adopted towards low impact schemes. The key difference is that we will develop Risk Assessment Framework (RAF) and Risk Mitigation Plans (RMP) – the second and third components of our regulatory approach in the case of high impact schemes.

The RAF will allow us to develop a fuller understanding of the business and control risks within high impact schemes. The RMP, on the other hand, will allow us to develop strategies and regulatory responses that mitigate the risks identified in the RAF. In this way, we intend to contribute to greater stability and confidence in the medical schemes market, as well as greater protection of the interests of members of medical schemes.

This document proposes the development of criteria that will be used to allocate medical schemes into three impact bands. The development of these criteria will be based on inherent risk or risk that is intrinsic to the specific scheme. The criteria will therefore not concern themselves with the impact of any related internal controls or established policies and procedures.

2. IMPACT

Impact is defined in this context as the **scale and significance** of a problem resulting from the registered schemes, if it were to materialise. The impact of a scheme is assessed by reference to a predetermined criteria.

2.1 IMPACT BANDS

Three categories of impact bands have been identified: high, medium and low impact bands.

2.1.1 High impact band

These schemes are judged to have a high impact on the environment thus seriously threatening Council's statutory objectives if they were to fail. They also have a higher likelihood of causing instability in the environment if they were to fail. The impact on beneficiaries potential beneficiaries, other schemes and

market confidence would be significant if the identified problems (risks) were to materialise.

2.1.2 Medium impact band

These schemes are considered to have a moderate impact on the environment if the scheme were to fail. The level of instability that might result if the risks in these schemes were to materialise will be comparably smaller than that of high impact schemes.

The nature and level of regulatory oversight will be different compared with high impact schemes.

2.1.3 Low impact band

These schemes are judged to have a relatively low impact on the environment if they were to fail. The level of instability that might result from events in these schemes will be low. These schemes will benefit only from routing monitoring, and will not require the development of RAFs and RMPs.

3. PRINCIPLES FOR THE DEVELOPMENT OF CRITERIA FOR ALLOCATION OF MEDICAL SCHEMES TO IMPACT BANDS

The selection of the indicators that will be used for the development of criteria will be based on the following principles:

1. operational: it should be measurable or quantifiable
2. valid: it should be able to measure what it is intended to measure
3. reliable: it should produce the same result when used more than once to measure the same phenomenon
4. specific: it should measure only the phenomenon it is intended to measure

5. sensitive: it should reflect changes in the state of the phenomenon studied
6. Realistic: it can be collected with available resources
7. Appropriate: it should be based on local needs and capacities
8. Comparability: it should allow for comparison in different entities

4. SELECTED INDICATORS FOR THE DEVELOPMENT OF A CLASSIFICATION CRITERIA

Two demographic indicators were selected for the development of risk criteria. These are the *number of beneficiaries* and the *proportion of pensioners* in a scheme.

1. Number of beneficiaries

A medical scheme with a high number of beneficiaries will have a serious impact on the environment if it were to fail. It will also cause instability in the market. This threatens the protection of beneficiaries and potential beneficiaries and market confidence and seriously challenges the accomplishment of the strategic objectives of the Council.

Determination of risk categories of schemes

The categories of the schemes were determined through statistical analysis. For purposes of consistency, only beneficiaries were considered. Schemes with membership less than 1000 beneficiaries were excluded as they were deemed too small and atypical of registered medical schemes. These were predominantly restricted schemes and open schemes that were new and were currently growing membership to the required statutory level. Percentiles were used and the results are as follows:

Percentile	Number of Beneficiaries	Score	Impact
80-100%	>=50 000	1	High
21-79%	6 000 – 49 000	0.5	Medium
0-20%	<6 000	0.25	Low

The following schemes were excluded from the analysis due to beneficiaries being less than 1000.

Scheme	Members	Beneficiaries
Pathfinder Medical Scheme	500	948
Cawmed Medical Scheme	533	720
Free State Medical Scheme	177	487
Aranda Textiles Medical Scheme	323	323
Ammosal Benefit Society	7	9
Universal Medical Scheme	2	9

Weight of the indicator

The weight of the indicator for scheme size has been set at 0.6 as it is considered the most important indicator in terms of impact on stability of the environment.

Impact assessment using the size of the scheme and weighting

Impact bands	weighted score
High	0.600 (1*0.6)
Medium	0.300 (0.5*0.6)
Low	0.150 (0.25*0.6)

2.2 Pensioners

Failure of a scheme with a high number of pensioners would impact negatively on the objective of providing protection and extending cover to vulnerable groups.

Pensioners were described as beneficiaries who were 65 years or older.

Determination of risk categories of schemes

The categories of the schemes were determined through statistical analysis. The pensioner ratio was calculated by taking a count of all the beneficiaries above the age of 64 years and dividing it by the total number of beneficiaries. The denominator excluded individuals whose age was unknown age, to minimize bias. Schemes with unusually high proportions (outliers) were excluded from the analysis as they were deemed atypical of registered medical schemes.

Percentiles were used and the results are as follows:

Percentile	Proportion of pensioners	Score	Impact
90-100%	≥ 0.2	1	High
11-89%	0.02 – 0.19	0.5	Medium
0-10%	0.019	0.25	Low

The following schemes were excluded from the analysis due to excessive and atypical proportion of pensioners. These schemes were already excluded from the analysis due to their small number of beneficiaries.

Scheme	Pensioners
Cawmed Medical Scheme	0.80
Ammosal Benefit Society	0.66

Weight of the indicator

The weight of the indicator for pensioner ratio has been set at 0.4 as it is also considered an important indicator in terms of impact to environment.

Impact assessment using the size of the scheme and weighting

Impact bands	weighted score
High	0.4 (1*0.4)
Medium	0.2 (0.5*0.4)
Low	0.100 (0.25*0.4)

Evaluation of Impact of scheme

The impact of a risk (problem) from a scheme is evaluated using a numerical rating of the effect that it would have on the environment, should it happen. A three level scale is suggested to measure the impact. The score will be a composite score resulting from the sum of the individual scores of the two indicators: beneficiaries and pensioners:

Impact rating of schemes

Risk	Aggregate weights	
	Minimum	Maximum
low	0	0.39
medium	0.40	0.65
high	0.66	1.00

EXAMPLE

Scheme	Scores		Weighted scores		rating	Impact band
	beneficiaries	pensioners	beneficiaries	pensioners		
Discovery	1	0.25	0.6	0.1	0.7	high
Medihelp	1	1	0.6	0.4	1.0	high
Minemed	0.5	0.5	0.2	0.2	0.4	medium
Massmart	0.25	0.25	0.15	0.1	0.25	low

Interpretation of results from the example:

Discovery Health

Discovery has a high number of beneficiaries and a low pensioner ratio. The overall impact score for this scheme is 0.70. The scheme is classified as a high impact scheme due to the number of beneficiaries.

Medihelp

Medihelp has a high number of beneficiaries and a high pensioner ratio. The overall score for this scheme is 1.0. This is considered a high impact scheme due to the number of beneficiaries and the proportion of pensioners.

Minemed

Minemed has a moderate number of beneficiaries and a moderate pensioner ratio. The overall score for this scheme is 0.4. This is considered a medium impact scheme.

Massmart

Massmart has a low number of beneficiaries and a low pensioner ratio. The overall score for this scheme is 0.25. This is considered a low impact scheme.

RESULTS

A total of 137 medical schemes were assessed for allocation into impact bands based on the criteria discussed above. Six medical schemes with membership less than 1000 were excluded from the assessment as their size was considered too small. Two medical schemes were excluded on the basis of their pensioner ratios that were regarded as outliers.

When the criteria was applied to schemes, 18.9% (n=26) schemes fell into the high impact band by virtue of their size, pensioner ratio or both. This was followed by schemes in the low impact band which accounted for 16.8% (n=23)

of all the schemes. Almost two thirds of schemes (n=87) fell into the medium income band.

Open medical schemes accounted for 65% of schemes in the high impact band while restricted schemes accounted for 75% of schemes in the medium impact band and 96% of schemes in the low impact band.

Table 1. Medical schemes by impact band

Impact band	Medical schemes		Total
	Open	Restricted	
High	17	8	26
Medium	22	65	88
Low	1	22	23
Total	40	95	137

Conclusion

This document has proposed a methodology for allocating medical schemes to impact bands based on the schemes' inherent risk. This categorisation of schemes into impact bands constitutes the first phase in the ongoing development of a risk based approach to our regulatory work. While all schemes will continue to enjoy a base level of supervision, we will allocate additional supervisory resources to schemes on the basis of schemes' inherent risk and allocation to an impact band. Essentially, all schemes judged to be high impact will enjoy greater levels of regulatory supervision, through the development of RAF and RMPs from such schemes. In this way, we will be able to focus our resources to the areas and schemes that pose the great risks to our statutory objectives of greater member protection and enhance stability and confidence in the medical schemes market.

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