

**Recommendations by the Risk Equalisation Technical
Advisory Panel**

to the Council for Medical Schemes

**Planned Methodology for
REF Contribution Table 2006**

RETAP Recommendations Report No. 6 of 2005

Adopted at RETAP Meeting 31 May 2005

Risk Equalisation Technical Advisory Panel (RETAP)

Following the approval of the Social Health Insurance (SHI) policy by the National Department of Health, the Minister of Health appointed a Ministerial Task Team (MTT) on Social Health Insurance to support the implementation of the SHI system in South Africa over the next five years. The MTT is made up of officials from the Department of Health, the Department of Social Development and the Council for Medical Schemes. In late January 2005 Cabinet approved the shadow implementation of the Risk Equalisation Fund (REF) and placed the responsibility for implementation with the Council for Medical Schemes.

The Risk Equalisation Technical Advisory Panel (RETAP) was established on 20 October 2004 as a consultative group used to assist in the development of technical requirements for implementation of the REF. RETAP's role flows from some of the key recommendations made by the original Formula Consultative Task Team (FCTT). In particular, the panel must focus its attention on the practical requirements for the implementation of the REF formula. Its recommendations should enable an action plan to be developed for implementing the formula, taking into account all the practical and technical issues that will arise in the implementation phase.

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1. Introduction

1.1 Purpose of the Report

RETAP advised on the REF Contribution Table [Base 2002, Use 2005] that applies for the first shadow year of operation of the Risk Equalisation Fund (REF). That Contribution Table was published in February 2005 together with the methodology that had been used and a series of recommendations for the future (see Appendix A).

Recommendation (AA) stated:

Medical schemes calculate and finalise their contributions for the following year during August and September in order to lodge rule amendments in October with the Registrar. It is critical for the live operation of the REF that schemes have access to the REF Contribution Table for the next year while doing their pricing. Accordingly the REF Contribution Table can be published no later than 31 July if the REF is to be live from the following January.

While the shadow period will continue in 2006, it is the intention to move towards the live timing needed for the REF as soon as feasible for all schemes and the REF Authority. Accordingly, RETAP recommends that the REF Contribution Table for 2006 be released as close as technically possible to the intended deadline of 31 July 2005. This document sets out the planned methodology to be used for the REF Contribution Table for 2006 and estimates the date on which the revised table can be released.

The report was prepared by Heather McLeod and Pieter Grobler. The document was discussed, amended and adopted by a full meeting of RETAP on 31 May 2005. This report is thus the formal recommendations from RETAP to the Council for Medical Schemes which is responsible for the implementation of the REF. The Council for Medical Schemes will need to satisfy itself as to the appropriateness of the recommendations and to formalise a decision on the planned methodology for the REF Contribution Table.

2. Guiding Principles and Base Year

2.1 Definitions and Guiding Principles

It is not anticipated that any of the guiding principles need to be reviewed.

2.2 Choice of Base Year for Shadow Year 2006

Recommendation (Z) in the 2005 report stated:

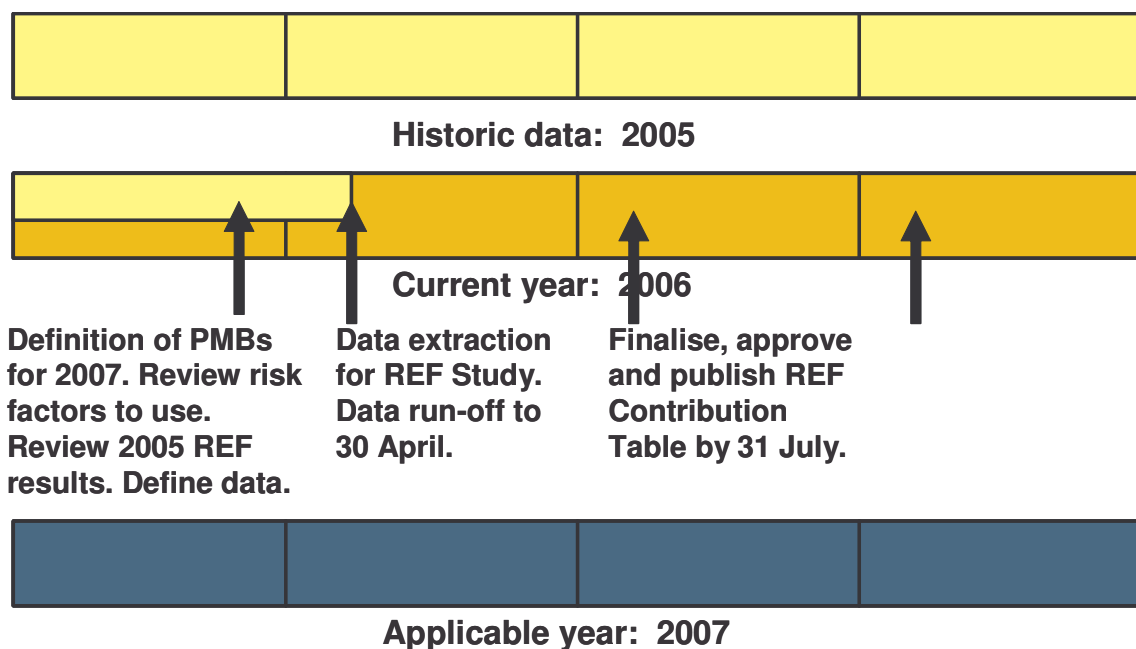
With the shadow period continuing until 2007 it would not be essential to revise the shape of the REF Contribution Table for 2006 although a full REF Study could be commissioned. Note that as 2004 saw rapid and large gyrations in medicine prices there would need to be a separate component commissioned to determine a reasonable expectation for medicine prices that might apply in 2006 as the raw data will not be reliable enough to use as the base.

The following factors were also taken into account in the decision about a base year to use for the REF Contribution Table 2006:

- The need to publish the revised table as close as possible to 31 July 2005 in order to prepare the industry for the live cycle of the REF.
- The first REF Grid returns are due to be received on 1 July 2005 and to be processed within 6 weeks of receipt.
- A complete exercise of refitting the curve would need to begin with data extraction from the industry with effect from 1 April of any cycle.
- There is a great deal of uncertainty in the industry at present about the precise definition of PMBs.
- The ICD10-coding of PMBs was published for comment in December 2004 and is expected to be finalised after further stakeholder comment by July 2005.
- Compulsory ICD-10 coding of accounts sent to medical schemes is also due to be implemented from July 2005.
- The quality of the 2004 data is very poor, particularly given the changes in medicine prices during that year.
- The quality of the data for the first six months of 2005 is no better.
- The costs of a complete refitting of the REF formula would be high, both in terms of time and resources.
- The Council for Medical Schemes has begun appointing staff to take responsibility for REF with the first person being appointed from 1 May 2005.

- Medical scheme trustees and their advisors are, in many cases, only getting to grips with the practicalities of the REF Contribution Table now. As such there have been few comments about the impact on schemes but this information is expected to increase in the latter part of 2006.
- There is a need to harmonise increases in the price of PMBs in the REF Contribution Table with the work being done for the NHRPL process.
- There is substantial uncertainty about the practicalities of the entry criteria for the REF Grids and several further pieces of work are underway. Again, as schemes begin to collect this data for the first time, so the number of queries and suggestions is likely to increase.
- It is critical that the definition of PMBs and the entry criteria are finalised BEFORE data is extracted for a revised fitting of the REF formula.

We have substantial concerns about the continued validity of the adjustments being used from raw price to full price for the PMBs. This will be exacerbated by extending the life of the raw data for a further year. However, the lack of clarity on the PMB definition and the entry criteria makes any new curve fitting using 2004 data of little use for the future. It would still be essential to conduct a full review prior to the introduction of a live REF Contribution Table. The cycle for the preparation of the REF Contribution Table for 2007 is illustrated below.



**Figure 1: REF Contribution Table Cycle
Illustrated for REF Contribution Table [Base 2005, Use 2007]**

RETAP recommends that the base year for the REF Contribution Table for 2006 should remain the 2002 data. The table will thus be known as the REF Contribution Table [Base 2002, Use 2006].

3. Package to be Equalised and Risk Factors

3.1 Amendments to PMBs in Regulation

No major amendments to PMBs to apply in 2006 have been notified by 10 May 2005. The work on a proposed Basic Benefit package has not proceeded to a stage where any modifications need to be made to the REF common package.

A change was made in the Gazette of 11 February 2005 in the wording of the published therapeutic algorithm for Multiple Sclerosis. Previously the treatment for the pathway “Frequent relapse, Secondary Progressive” was “Consider immuno-suppressive therapy e.g. methotrexate or cyclophosphamide or azathioprine”. The revised algorithm replaces the treatment with “Consider beta-interferon”.

Beta-interferon was specifically excluded when the average cost of treating Multiple Sclerosis was developed in 2004 and 2005. We consider it essential to reconsider the base data in order to include the cost of beta-interferon.

3.2 Impact of Change in Coding of PMB-DTPs

The 2005 report stated “It is thus imperative that a proper study be conducted of the impact of the new finalised Council for Medical Schemes cross-walk on the earlier studies on the price of PMBs and the REF Contribution Table for 2004. RETAP strongly recommends that the Council for Medical Schemes produce an assessment of the financial impact of the newly published PMB ICD-10 cross-walk, compared to the PMB 2001 Study and the REF 2002 Study.”

Work is being done by industry stakeholders, particularly Dr Brian Ruff. The impact of these results will be considered during the pricing of the REF Contribution Table 2006.

3.3 Risk Factors

The envisaged study on the issue of including gender can only be carried out once schemes begin to submit data to the REF Authority. It is thus too early to make any modification for gender.

The count of people in each cell is a function of the definition of the entry criteria and the criteria for validation of the data. It is again too early to make any changes to those definitions.

Therefore no change will be made to the risk factors used for the REF Contribution Table 2005:

- Age last birthday on 1 January, summarised into age bands Under 1, 1-4, 5-9, 10-14... 75-79, 80-84, 85+.
- The 25 PMB–CDL conditions. Where a beneficiary has more than one CDL conditions, the scheme may choose the most expensive of the conditions for the placement of the beneficiary in the REF Grid Count.
- HIV/Aids provided the beneficiary is receiving or has received anti-retroviral therapy according to the PMB definition;
- A modifier for maternity, delivery of a single/multiple foetus either stillborn or alive following a pregnancy of at least 24 weeks duration;
- A modifier for the number of multiple CDL conditions. Allowance is made for 2, 3, and 4+ simultaneous CDL conditions.

3.4 Rules for Determining REF Grids

The RETAP meeting of 31 May considered several diseases where the possibility of gaming the REF Grids was considered problematic. RETAP proposed the following rules with regard to the REF Grids and the feasibility of these will need to be tested in the determination of the REF Contribution Table 2006 and 2007:

- **Asthma and COPD:** a beneficiary may be allocated to only one of the two diseases – i.e. obtaining REF reimbursement for the multiple condition Asthma and COPD is not possible.
- **Cardiac failure and Cardiomyopathy:** a beneficiary may be allocated to only one of the two diseases. The average costs for the two diseases to be made equal.
- **Hypertension:** test whether costs for severe disease can be allocated to co-morbidities i.e. so that the column deals with Hypertension as a single disease. In addition, as there are still incentives to game this diagnosis, the REF might pay only 50% of that number. This form of response is in line with the recommendations from the International Review Panel that where uncertainty and the possibility of gaming exists in the definition for a chronic condition that the REF may reimburse a lower percentage of the observed costs.

4. Adjustments in the REF Contribution Table

4.1 Adjustment for Target Population

Note that the target population age profile used does not affect the REF Contribution Table itself, but does have a substantial impact on the Industry REF Community Rate derived from the table and hence on the payments to or from the REF.

As at May 2005 the full SHI framework which incorporates income-based cross-subsidies has not yet been approved by Cabinet, although it is policy of the Department of Health. Accordingly it seems unlikely that there will be any substantial change in the membership of medical schemes during 2006. RETAP therefore recommends that no adjustment be made for any change in target population due to the impact of SHI.

The REF Contribution Tables for 2004 and 2005 used the existing medical scheme population as derived from the age profiles submitted to the Registrar of Medical Schemes in 2002.

Actual data gathered from the schemes using the REF Grids will be available after the first submission on 1 July. The cleaning and processing of the first REF returns is scheduled to take some six weeks. Thus the first detailed industry grid is likely to be available in early August. It is strongly recommended to incorporate this data in determining the Industry REF Community Rate for 2006. This implies that the REF Contribution Table for 2006 can only be published towards the end of August or in early September 2005.

The clarification of REF CDL Entry Criteria for clinical purposes has proceeded well and there is substantial agreement on the clinical criteria. A process of determining REF Verification Criteria has begun and this is the data schemes would be expected to keep in order to verify the REF Grid status of a beneficiary. A key component is the definition of a "treated patient" which is the minimum required for counting a person in the REF Grids. This process will still take several months and thus the target date for implementation is probably 1 January 2006.

This means that the first REF Grids received in respect of the 2005 data will be a combination of "treated patient" data and more "fuzzy" data derived from auto-chronic processes and chronic programme registrations. There is thus no certainty that the REF Grids to be received in July will be valid for future REF Contribution Tables. The data received will need to be evaluated and some combination of actual grids and expected grids may need to be used for determining the Industry Community Rate for 2006.

An issue that will need to be considered in the work on the 2006 table is whether to allow for future changes in the number of people identified with CDL diseases. It is recommended that the sensitivity of the table be tested for an increase in the number of people identified with CDL diseases.

4.2 Adjustment for Demographic Profile of Base Data

As there is not expected to be a major influx of new members who were previously not in medical schemes, no adjustment is envisaged.

4.3 Adjustment from Raw to Full PMB Cost

The 2005 report stated:

In time, as schemes fully adopt the ICD-10 coded PMBs, so the data obtained from the industry will reflect this definition of PMBs and an adjustment from raw to full cost of PMBs will become increasingly unnecessary. However an adjustment is still needed for the REF Contribution Table for 2005 and will be needed at least for 2006 and 2007 (possibly based on 2005 data).

It is thus only for the 2006 raw data onwards that we might be reasonably certain of the definition of PMBs but this will need to be reviewed depending on the success of implementation of both the provision of ICD-10 codes and the ICD-10 definition of PMBs throughout the industry.

This adjustment will therefore need some careful estimation.

4.4 Adjustment for Inflation

Effectively it is necessary to remove the estimate of inflation factors for 2004-2005 used in the 2005 table and replace them with actual inflation for the 2004-2005 period and then add an agreed estimate for 2005-2006.

4.5 Adjustment for Efficiency

Changes to this adjustment are balanced against the margin for uncertainty in the price of PMBs in the adjustment from raw to full prices. No change in the policy with respect to the level of efficiency is needed.

5. Policy Interventions, Specific Disease Costs

5.1 Treatment of Multiple Sclerosis

The review of the average cost for treating Multiple Sclerosis will need to be amended in the light of the change in the published therapeutic algorithm.

5.2 Maternity Modifier Protocols and Costs

A revised costing of maternity was done from first principles using the WHO guidelines and NHRPL prices for 2004. This will need to be updated to envisaged NHRPL prices for 2006.

Stakeholder comment will be taken into account on the current weighting 50% NVDs to 50% c/s for the REF Contribution Table 2005. It was planned to change this proportion to 55% NVDs and 45% c/s for 2006.

5.3 HIV/AIDS Treatment Costs

The 2005 report stated:

The definition of the starting point for anti-retroviral therapy affects the data extracted both for this section and the subsequent one dealing with the prevalence at various stages in the epidemic. There can be no adjustment of the REF Contribution Table for 2005 but RETAP recommends that the PMB definition be evaluated and entry criteria agreed so that appropriate data can be extracted before the next adjustment to the REF Contribution Table for 2006.

In the interim schemes are requested to provide evidence of the impact of the difference in the guidelines for evaluation by RETAP.

No further stakeholder input has been received on this issue as yet. Without adequate evidence it is therefore not envisaged that changes will be made to this item, other than inflationary changes.

5.4 Progression of the HIV/AIDS Epidemic

Leigh Johnson of the Centre for Actuarial Research (CARE) was approached to provide estimates of the numbers of people on HAART each year in the private sector. He provided estimates for each year from 2002 to 2010. He is currently working on refining these estimates. If new results are available, they will be used.

The BHF estimates are due to be released in early June but have not been submitted to RETAP as yet. The BHF estimates have not been tested against the CARE estimates and RETAP will need to evaluate the BHF data once released.

These projections will need to be carefully blended into the actual numbers of people being treated as disclosed by schemes in their first REF Grid submissions on 1 July 2005.

Bibliography

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Appendix A: Recommendations in 2005 for REF Contribution Table for 2006 and Beyond

(Z) With the shadow period continuing until 2007 it would not be essential to revise the shape of the REF Contribution Table for 2006 although a full REF Study could be commissioned. Note that as 2004 saw rapid and large gyrations in medicine prices there would need to be a separate component commissioned to determine a reasonable expectation for medicine prices that might apply in 2006 as the raw data will not be reliable enough to use as the base. (Section 1.6)

(AA) Medical schemes calculate and finalise their contributions for the following year during August and September in order to lodge rule amendments in October with the Registrar. It is critical for the live operation of the REF that schemes have access to the REF Contribution Table for the next year while doing their pricing. Accordingly the REF Contribution Table can be published no later than 31 July if the REF is to be live from the following January. It is not feasible to make the REF live from the middle of a calendar year. (Section 1.6)

(BB) The Council for Medical Schemes needs to indicate by 30 May 2006 whether the REF will be live from January 2007. In that case, a complete fitting of the formula should be undertaken on 2005 data and publication of the REF Contribution Table [Base 2005, Use 2007] must occur by 31 July 2006. The full study will need to use data from 2005 that has been substantially run-off, thus probably extracted at the end of May 2006 for treatment dates in the period 1 January to 31 December 2005. (Section 1.6)

(CC) The REF is a key stakeholder in the discussions on the inclusion of primary healthcare. The timing of the change to the PMB package must be co-ordinated so that the REF Contribution table can be published by 31 July of each year. This implies that the definition and pricing of the primary healthcare package must be completed by 31 May of the year prior to the implementation of that package in the REF formula. RETAP strongly recommends co-ordination of the process by the Council for Medical Schemes to ensure that the REF deadlines are taken into account. (Section 2.1)

(DD) In time, as schemes fully adopt the ICD-10 coded PMBs, so the data obtained from the industry will reflect this definition of PMBs and an adjustment from raw to full cost of PMBs will become increasingly unnecessary. However an adjustment is still needed for the REF Contribution Table for 2005 and will be needed at least for 2006 (likely to be based on 2004 data) and 2007 (possibly based on 2005 data). It is only from the 2006

raw data onwards that we might be reasonably certain of the definition of PMBs in the raw data but this is dependent on the provision of ICD-10 codes. (Section 2.2)

- (EE) It is imperative that a proper study be conducted of the impact of the new finalised Council for Medical Schemes cross-walk on the earlier studies on the price of PMBs and the REF Contribution Table for 2004. RETAP strongly recommends that the Council for Medical Schemes produce an assessment of the financial impact of the newly published PMB ICD-10 cross-walk, compared to the PMB 2001 Study and the REF 2002 Study. (Section 2.2)
- (FF) The REF Authority will need to consider whether there is sufficient evidence to split at least the NON (i.e. no CDL) column into male and female columns in time for the REF Contribution Table for 2006. If evidence of gender-specific differences in average cost become apparent in the data then consideration will need to be given to the degree of impact and whether any or all of the CDL diseases should also be split into male and female columns.
- (GG) RETAP recommends that in the review for the REF Contribution Table for 2006 that the issue of whether to fully include the CDL risk factors again be considered. The greatest danger is now seen to be the potential up-coding of beneficiaries from no CDL condition to having a CDL condition. Any potential problems in this regard should begin to become apparent in the reporting during the shadow period. (Section 3.3.3)
- (HH) RETAP recommends reviewing each set of submissions in the shadow period and comparing the REF Grid Counts submitted against those implicit in the construction of the REF Contribution Table. (Section 3.3.3)
- (II) RETAP recommends that the actual data gathered from the schemes using the REF Grids during the shadow year should be used as the base age profile for the work on the 2006 table and subsequent tables. (Section 4)
- (JJ) RETAP recommends that once clarity is obtained on the implementation of the Social Health Insurance framework incorporating an income-based cross-subsidy, the issue of the appropriate target population should be revisited. It is recommended that the age profile for the target population at that time be determined from the SHI Model developed by the Department of Health that incorporates the Census 2001 data. (Section 4)
- (KK) When an adjustment needs to be made to a new target population in future, RETAP recommends taking the actual age profile from the submitted REF Grid Counts and

adjusting by a factor derived from Census 2001 data. The factor is the ratio of increase from the medical scheme population to the new target population chosen. (Section 6.1)

(LL) RETAP recommends that the IRP recommendations on methodology be considered when the next full study of the risk factors and the shape of the curve is undertaken. (Section 5.1)

(MM) RETAP recommends that the IRP recommendations on data be considered when the next full study of the risk factors and the shape of the curve is undertaken. Note that the recommendation on age bands will already have been implemented in the shadow year 2005. (Section 5.2)

(NN) RETAP recommends that once the full SHI framework is imminent and there is expected to be a substantial influx of new beneficiaries that the question of an adjustment for the demographic profile of the target population compared to the REF Study population is revisited. (Section 6.2)

(OO) The lack of a study of the implications of the changes in the Council for Medical Schemes cross-walk published on 30 December 2004 means that there is no evidence before RETAP as to how to adjust the margins from raw to full price of PMBs. This issue must receive urgent attention in the first six months of 2005 in order to make an informed decision for the REF Contribution table for 2006. (Section 6.3)

(PP) RETAP suggests that this index would have wider application in the medical scheme environment than only the updates to the REF Contribution Table. Considerable research work would need to be done and should be linked to the research underpinning the annual increases in the National Health Reference Price List. Thus RETAP recommends that this issue be considered by the research division of the Council for Medical Schemes. (Section 6.4)

(QQ) The efficiency adjustment and the margins from raw to full price of PMBs need to be flagged for revision for 2006 and particularly when data improves on PMBs for the study in 2007 for the 2008 Contribution Table. (Section 6.5)

(RR) For the calculation from first principles of the Maternity modifier RETAP recommended using a weighting of 50% NVDs to 50% c/s for the REF Contribution Table 2005. It was recommended to reduce this proportion each year subject to annual review and further input from stakeholders. Initial expectations, before representation from stakeholders, are to reduce the amount by 5% to a weighting of 55% NVDs to 45% c/s for the REF Contribution Table 2006. (Section 7.2)

(SS) RETAP recommends that the Centre for Actuarial Research be approached annually for updates of the expected number of people on anti-retroviral therapy in the private sector. These projections will need to be carefully blended into the actual numbers of people being treated as disclosed by schemes in their REF Grid submissions. (Section 7.4)