

Guidelines for Electronic Data Submissions to the Risk Equalisation Fund

**Prepared on behalf of the Council for Medical
Schemes by Knowledge Objects Healthcare**

Version 1.1

8 June 2006

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1. Executive Summary

The Council for Medical Schemes is preparing for the establishment of the Risk Equalisation Fund for South Africa and is currently developing IT Systems that will support the financial transfers associated with the REF. A central registry of all medical scheme beneficiaries will be established that will contain data on the REF risk factors associated with medical scheme beneficiaries.

The purpose of this document is to provide scheme administrators with usable technical guidelines on what data the Council for Medical Schemes requires for the Risk Equalization Fund, detailing both how submitted data should be formatted, as well as describing those documents which will be returned to administrators from the CMS. This document describes the *format* of data that will be exchanged between scheme administrators and the CMS with a view to enabling scheme administrators to begin technical preparations to for the exchange of such data.

2. Overview

The purpose of the Risk Equalization Fund is to track the risk factors between schemes in order to enable equalization of those risks. REF Risk Factors¹, currently based on 26 chronic diseases, are factors which have been identified as significant metrics for performing equalization among schemes.

Experience during the shadow period has indicated that the use of consolidated information provided by medical schemes does not provided sufficient information that can be used as a basis for the transfer of REF funds in an accountable manner. Figure 1 below indicates that during the shadow period, schemes are responsible to analyse data from their beneficiary and claims databases to create REF Grids. The CMS has no control over this process. Should the REF Office institute Audit processes to evaluate the creation of REF Grids at scheme level, the process will have to be audited every quarter at each scheme. This is clearly not achievable. The shadow period system, therefore, does not offer adequate control over data quality and creates an opportunity for fraud.

¹ Formerly referred to as CDLs, REF Risk Factors are based on the Chronic Disease List. Please see the CMS document entitled "Guidelines for the Identification of Beneficiaries with REF Risk Factors in Accordance with the REF Entry and Verification Criteria." For more details on REF Risk Factors.

Figure 1: Motivation for a Central Registry

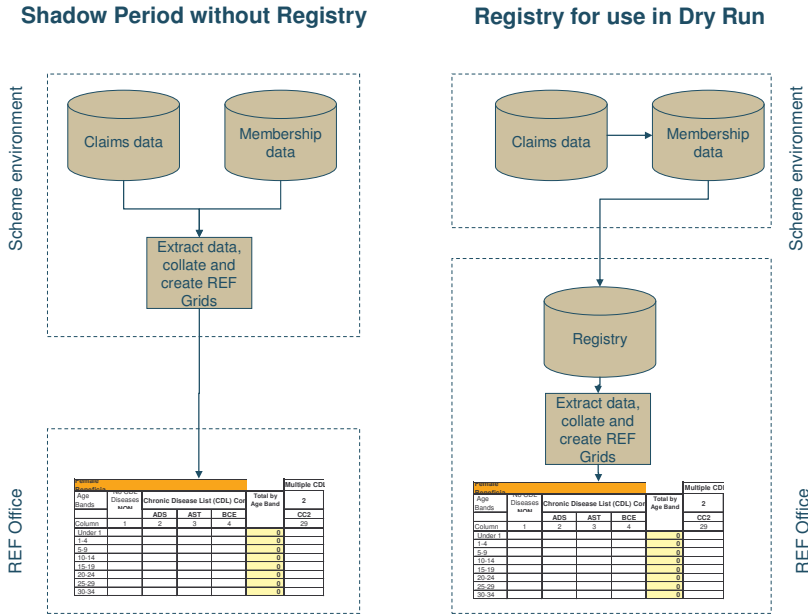
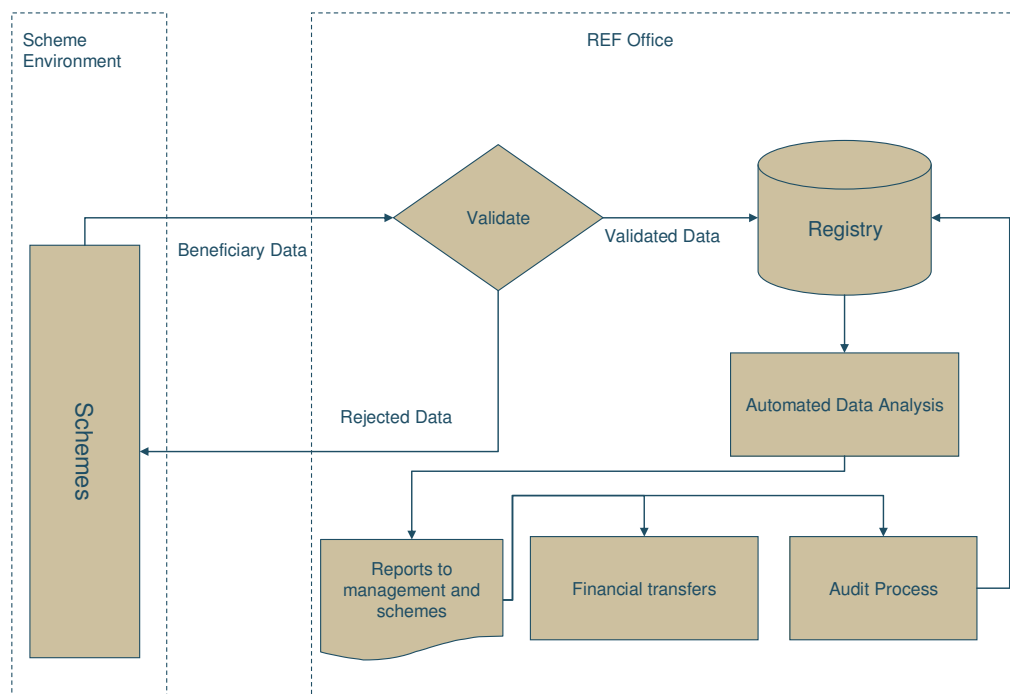


Figure 1 (above) demonstrates that, with the use of a central registry to which schemes send their beneficiary data, the REF office will have the ability to generate Grids on behalf of the schemes with improved consistency and data quality control. This approach reduces the opportunity for gaming and will allow easier detection of fraud before financial transfers are approved.

In the schematic presentation of the IT Application in Figure 2 below it is demonstrated that the REF registry will be updated by Medical schemes through a secure communication channel. Data submitted by medical schemes will first be inspected in a “staging zone” where data will be subjected to a variety of automated rules to check the data for integrity and validity. If errors are found, the offending line items of data are rejected and automated messages are returned to the Administrator. Only the valid, acceptable data is uploaded into the registry. The system will also perform checks to ensure that a beneficiary is not registered with more than one scheme simultaneously. If data creates the suspicion of being fraudulent, the audit department is notified automatically. The registry will draw from the existing CMS Medical Scheme database to perform automated cross checks of the submitted data.

Figure 2: The Design of the Registry



The use of an IT system to trigger audits and to control the quality of the data in the registry is presented diagrammatically above. Based on rules written in the registry, automated reports will be presented to the Audit Department, who will perform further analyses and request supporting claims data from schemes if required.

NOTE: As of the time this document was last revised, the technical details for the web portal had not been finalized. To this end, this document specifically does not address features or specifications relating to the transmission of data via the portal.

The Registry acts as a blind data repository – while all schemes are required to submit risk-related data to the Registry, the registry itself remains veiled – the data contained therein is considered sensitive and is therefore not made available to *any* parties. To reduce the Registry’s risk of “leakage”, even the Administrators submitting data to the Registry may not electronically recall/retrieve membership information *from* the Registry. In technical terms, the Registry system may be considered to be “write-only”.

Before the first Dry Run can commence, the Registry needs to be populated with both beneficiary and risk data. The CMS systematically monitors the timely receipt of data from Administrators. Routine audits will be performed in a systematic manner, as well as in response to data irregularities to ensure that the data on the registry is properly maintained.

In order to populate the registry with beneficiary information, scheme administrators are required to submit two fundamental data points to the CMS:

1. Information about beneficiaries belonging to the scheme.
2. Information about beneficiaries with REF risk factors.

NOTE: The term “beneficiary” refers to any individual who is a member of a scheme, regardless of whether or not that individual has submitted claims to the scheme. By way of this definition, the “Registration of beneficiaries” process defines how schemes will register (that is – “make known”) all individuals who belong to the scheme.

The CMS recognizes a distinction between *beneficiaries* and *memberships* in that some individuals may be dependents of a primary member and therefore share the same *membership*.

The following sections will describe the processes by which Administrators submit data the Registry about beneficiaries and risk.

3. Data Submissions

There are two distinct processes whereby administrators submit data to the REF Registry:

1. Beneficiary Registration.
2. REF Risk Factor Submission.

Beneficiary registration is the process whereby administrators notify the Registry of which individuals have joined or left the scheme, or whenever the individual's details have changed.

| | |
|--------------------|--|
| DEFINITION: | <p>REF IDs: Beneficiaries are tracked within the Registry using unique 16 digit identifiers which the system automatically assigns as individuals are registered in the Registry system. These identifiers (called REF IDs) are unique life-time numbers and are used in all subsequent electronic correspondence with the Registry to identify an individual.</p> <p>The Ref ID is intentionally distinct from SA ID numbers for two reasons:</p> <ol style="list-style-type: none">1. SA ID numbers are often not known for at least the first year of a beneficiary's life, and are subject to change during certain life events, including marriage and gender re-assignment.2. A valid REF ID serves as proof of registration. |
|--------------------|--|

REF Risk Factor Submission is the process whereby administrators notify the Registry of which beneficiaries were treated for Chronic Diseases a particular month.

The membership (beneficiary registrations) and risk (REF risk factor submissions) data submitted to the Registry forms the foundation for a risk assessment for a scheme, and this risk assessment, relative to the assessed risk of other schemes, is translated into a relative "cost of risk" which is used in the Risk Equalization Run.

| | |
|--------------------|--|
| DEFINITION: | <p>Risk Equalization Runs are financial transactions between schemes exacted on behalf of the Risk Equalization Fund by the CMS.</p> |
|--------------------|--|

Both beneficiary registration files and REF Risk factor files require that each line item submitted contain a field to identify the Scheme and Option to which the line item

pertains. This field (the “SchemeOptionId”) is a unique number which differentiates various schemes, options and administrators from one another. The CMS assigns these identifiers whenever schemes are registered for Risk Equalization, as well as whenever schemes merge or split. Please contact the CMS for to manually register for a Scheme Option Id before submitting data.

The two data submission processes are detailed in the next two sections. In both cases, basis of electronic interaction with the registry is:

1. Submit a file to the Registry.
2. The Registry processes the submitted file.
3. A Response file is returned.

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| NOTE: | <p>With all submission/response interactions, the response file always details successes or errors on a <i>per-line-item</i> basis. This means that a file is never rejected in it’s entirety as a result of one or more errors. Those line-items which contain valid, acceptable data are duly processed.</p> <p>Line-items which trigger errors are <i>never</i> loaded by the Registry – meaning that if an error code is returned for a line item, that no changes occurred as a result of that particular line-item.</p> <p>It is possible for a single line item to contain multiple errors. Where multiple errors are detected, the response file will contain a separate error line for each error detected. See the File Formats section (below) for more.</p> |
|--------------|---|

3.1 Beneficiary Registrations

Beneficiary Registration enables administrators to notify the Registry of any of the following conditions:

1. A beneficiary has joined a scheme and become eligible to receive benefits (the “initial registration”)
2. A beneficiary has changed from one option to another within a scheme.
3. A beneficiary has been terminated from a scheme, either due to death or resignation.
4. A beneficiary’s personal or contact details have changed.
5. Corrections to dates, like the date of enrolment, the date when the beneficiary was first entitled to benefits, etc. are being amended.

Of the above scenarios, only the first will result in the Registry returning a RefID for the newly registered beneficiary. In all other scenarios, the Administrator is not actually registering a new beneficiary, as much as registering changes of

membership status or beneficiary details with the Registry; Hence, the first scenario is *the only scenario* where the Registry will yield a RefID – in all other scenarios of correspondence with the Registry, the Administrator is required to include the beneficiary's RefID.

NOTE: Amending information like dates of enrolment, entitlement (to benefits) and termination, beneficiary birth date or gender causes an automatic re-assessment of a schemes risk for any periods affected by those changes.

The process of beneficiary registration follows these steps:

1. The administrator prepares a *Beneficiary Registration File* and electronically submits it to the Registry.
2. The Registry responds with a *Registration Response File* which for every submitted line-item will contain a response code indicating either a successful registration, or a reason for rejection.
3. The administrator receives the response file and records the RefIDs of new registrations. For failed registration line items, the Administrator corrects the registration data and resubmits a new beneficiary registration file

The registration of beneficiaries is a prerequisite to the submission of REF Risk Factors – that is – a scheme cannot submit information about those members suffering from chronic conditions until all the scheme's members have been registered with the CMS.

Beneficiary Registrations may be submitted on an Ad-hoc basis – that is – administrators may choose a submission schedule that best suite their IT systems and operations. All beneficiary registrations for a given period must be performed *before* REF Risk Factors are submitted for a period (see next section).



At a minimum, schedule Beneficiary Registrations:

1. Before attempting a REF Risk Factor submission.
2. Whenever beneficiaries join or leave a scheme or switch options.
3. Whenever previously submitted data was found to be incorrect.

NOTE: Beneficiaries do not need to be registered with the REF until such time as they are eligible for benefits and/or have made their first contribution to the scheme. Often times, an individual applies for membership within a scheme, then cancels that application within the same day/week. It is not necessary to register these occurrences with the Registry.

3.2 REF Risk Factor Submissions

On a monthly basis, administrators submit data about beneficiaries who have been treated for one or more “chronic disease” conditions in the preceding month. A REF Risk Factor file is the vehicle by which this data is submitted to the Registry, and should always be submitted within the first 5 days following the of month-end of the period represented by the file. See the CMS document “Guidelines for the identification of REF Risk factors” for more details on risk factors.

While Risk Equalization Runs are performed on quarterly basis, equalizations are calculated as the average risk across the three months in a given quarter. As such REF Risk Factor data is collected on a monthly basis.



Do not calculate/tabulate treated conditions (REF Risk Factors) on a quarterly basis! Three sets of REF risk factors must be submitted for any given quarter – one set for each month in the quarter.

Each REF risk factor indicates the *treatment* of a beneficiary in a given month – that is – that claims have been effected/realized in that month. The date of diagnosis / treatment is not relevant to risk equalization – only the date when a claim for treating a condition is realized. To this end, delays resulting from claims processing between providers and schemes do not impair the ability to report of claims realized during a period at the end of that period.

DEFINITION:

Treatment implies not only the diagnosis of a condition, but more importantly payment of claims that demonstrates activity in treating a patient. See the CMS document “Guidelines for the Identification of Beneficiaries.”



Do not “grandfather” REF Risk Factors against any beneficiary. It is considered fraudulent to list a beneficiary as having a chronic condition for a particular month if no claims (or other qualifying factors) exist to prove treatment of the beneficiary for the given condition in *that particular month*.

When an administrator submits a REF Risk Factor submission file, once the file has been processed by the registry a REF Risk Factor Response file is returned to the administrator which provides feedback about every line item that was submitted.

The rejection of one or more REF Risk Factor line items in this file does not constitute a rejection of the submission in its entirety. In other words – those submitted REF Risk Factor line items which are accepted are deemed to constitute the entire of the

claimable REF Risk Factors for that scheme for that period – even if only one line-item is accepted!

Corrections and amendments are, fortunately, possible. See below in this section for information on performing corrections and/or amendments to REF Risk Factor submissions.

| | |
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| NOTE: | The registry does not make any distinction based on what <i>day</i> a RRF is claimed for a beneficiary – the system will only review the month and year to determine the period into which the RRF falls. |
|--------------|---|

The standard process for REF Risk Factor submissions is:

1. The Administrator compiles the past month's risk data into a *REF Risk Factor Submission file* then submits the file to the Registry.
2. The Registry processes the submission.
3. A response file is returned, detailing which line items were accepted and which were rejected.
4. The Registry produces prevalence, count and cost risk reports, posts them to the Administrator's private section of the web portal, then sends a message to the administrator to indicate the existence of the new reports.

| | |
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| NOTE: | A single REF Risk Factor Submission may contain submissions for multiple Options or Schemes. Indeed, risk factors for any Scheme or Option for which the submitting party is registered as the administrator may be submitted. |
|--------------|---|

3.2.1 How submissions are interpreted

While the format of a REF Risk Factor submission file is well specified, administrators responsible for submitting factors on behalf of multiple schemes (or for schemes with multiple options) may choose whether to submit separate files for each scheme/option, or whether to combine all information for those schemes/options into a single file.

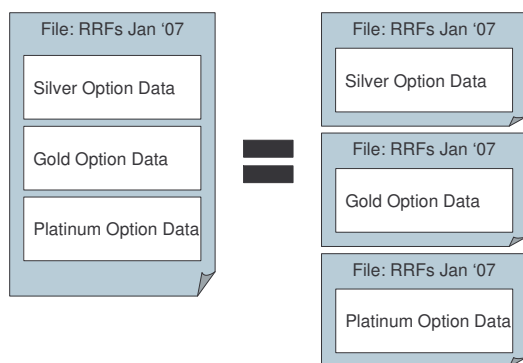


Figure 3: Data for options may be combined or separated

When a file is submitted, the Registry system scans the file for all the distinct schemes/options listed in line-items within the file, and deems that file to be the holistic truth for those schemes/options during that period. Stated differently, there is no such thing as a *partial submission* – the existence of even one line-item for a specific scheme/option signifies that the file is the *whole* submission for that scheme/option for that period.

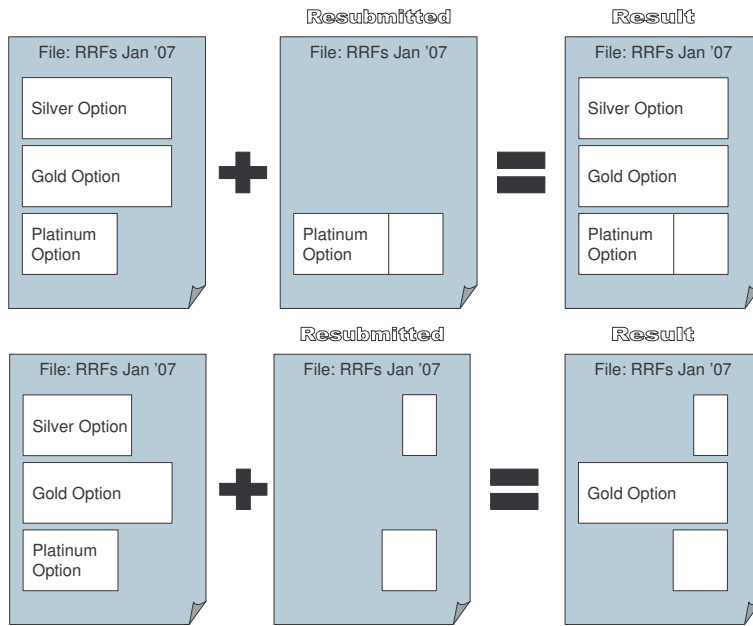


Figure 4: The effect of including data for an option

3.2.2 Amendments and Corrections

It is foreseeable that administrators will wish to make adjustments to previously submitted REF Risk Factor information. To correct or amend data for a period, simply submit a new REF Risk Factor file for that period.

NOTE: Whenever a new REF Risk factor file is submitted for a period, it *replaces* any previously submitted file for that period. For this reason, any corrections or amendments *must* contain *all* risk factors for that period, since the previously submitted data is “erased”.

Amendments differ from corrections only as a result of the time-frame in which they are submitted. When a REF Risk Factor file is submitted *before* a Risk Equalization Run has been assessed (i.e. within the first 5 days of the following quarter) then the file is deemed to be a correction. Any time after that the file is deemed to be an amendment – it will only be affected in the following quarter’s equalization – as an amendment to the previous quarter.

NOTE: Altering the enrolment and/or termination date of a registered beneficiary similarly triggers either a correction or amendment process, since altering these dates effectively changes the head-count for a scheme for one of more periods.

When submitting amendments or corrections, it *is possible* to amend multiple periods within one submission. In other words, it is possible to submit a single file to amend an entire quarter’s risk factors. In a similar manner to how the Registry reacts to the partitioning of Scheme/Option data, if even one line item for a specific period for a specific option is present in the file, the Registry interprets this as meaning that the file contains *all* data for that period for that option. It is at the administrator’s discretion to choose whether to submit a single file containing all corrected data, or to submit multiple smaller files containing data only for those periods and schemes/options where corrections were required.

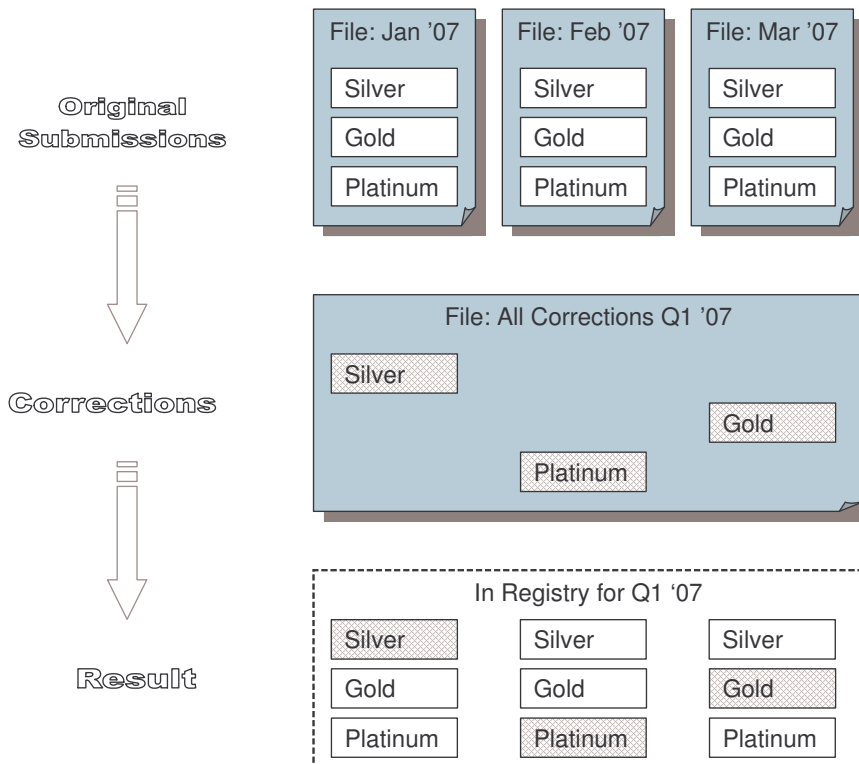


Figure 5

Figure 5 (above) visually describes the effect of submitting corrections or amendments. The rule of thumb to observe is:

“With any RRF Risk Factor File submitted, if data for any specific option *and* period is included, then that file is deemed to contain *all* data for that specific option for that specific period.”

Conversely submitting corrected data for January in Q1 *does not imply* that the file contains corrections for February or March. Only the inclusion of February and March data would trigger replacement (correction) for those periods.

4. Use of ZIP file compression

The detection of faulty electronic transmissions is vital to the success of the Registry. The use of ZIP file compression is a required to enhance the integrity of data processing as it arrives at the Registry.

Beneficiary Registration files as well as RRF Risk Factor files are transmitted to the REF in ZIP file format. For more information and to download free tools for this open compression standard, see www.7-zip.org/ or www.info-zip.org/.

Zip files provide many advantages to both administrators and to the REF, including:

- Data compression, resulting in:
 - Reduced Internet bandwidth requirements.
 - Faster electronic transmission and response cycles.
- Intrinsic data integrity checking.
 - Zip files using a technology called CRC32 to verify whether any data has been lost or impaired during transmission. The Registry will automatically reject files which have been damaged or altered during transmission.

The naming of zip files prepared by administrators does not affect the processing of the contents of the zip file by the Registry. The CMS suggests keeping the zip file name consistent with its contents. See the file format sections below for naming conventions on Beneficiary Registry and RRF Risk Factor files.

5. File Formats

The CMS recognize that different scheme administrators have different information technology systems and therefore have different technology capabilities available for complying with the Risk Equalization Fund. In light of this, the CMS has provided two distinct formats for submitting files – the use of either text files (pipe-delimited text) or Microsoft Excel files.

Excel files are intended to provide administrators of smaller schemes with an easy-to-use means of submitting information to the Registry. Available on the CMS website, are Excel template files which may be used to produce REF-compliant data files.

Pipe-Delimited files are intended for larger scheme administrators who have in-house IT capabilities. Pipe-Delimited files are more compact and can contain unlimited volumes of data.



Excel files are limited in the volume of data they can contain. The REF Registry will accept as much data as can be stored in an Excel file, but the CMS strongly recommends the use of pipe-delimited files for larger scheme administrators.

The format of the response file returned by the CMS is determined by the format of the file submitted to the CMS – when an Excel format file is submitted, an Excel format file is returned, likewise with pipe-delimited files.

5.1 Excel File Formats

All Excel files will begin with the column headings in the first row of cells of the spreadsheet (as per the Excel templates). All date fields must be formatted as Excel dates in the South-African English locale – as either DD-MM-YYYY, or DD/MM/YYYY.

5.2 Pipe-Delimited File Formats

All files submitted to the CMS will be formatted as standard 8-bit ASCII text files.

Tabular (data submission) files all comply with the following standards:

1. Always one line item per row; No single line item of data may contain carriage return or line feed characters.

2. All rows delimited by the carriage return + line feed character combination.
3. All fields are variable field length, delimited using the pipe character (ASCII=124).
4. Text fields are *never* demarcated or enclosed in single or double quotes. Any quotes detected are regarded as a part of the actual data.
5. All dates in will be 10 characters long, in the format: DD-MM-YYYY
6. The first row *always* contains the names of data columns.
7. Unless otherwise stipulated, numbers (ID numbers, account numbers, etc) do not contain spaces, hyphens or other punctuation marks.
8. All phone numbers are consistently formatted, beginning with an international dialling prefix, followed by the area code in parenthesis, then the first 3 digits, a hyphen, then the remaining 4 digits. Office PBX extensions are denoted with an 'x'.
E.g. +27(11)435-1334 for a normal Johannesburg land line, or
+27(11)435-1000x41 for an office PBX line with extension 41, or
+27(82)557-2212 for a mobile phone.
9. Text fields are never padded with leading or trailing spaces or tabs.
10. Numeric fields are never padded with leading or trailing zeros.

5.3 Beneficiary Registration File

Beneficiary Registration Files may be given any suitable filename, but must end with the extension “.BRF”. For example, a valid Q1 2006 registration file for Old Mutual might be named: OldMutualQ1-06.BRF

5.3.1 Beneficiary Registration File Format

Note: In the tables which follow, “Field Name” is the name of the column heading (the first row of the file), and “Max Length” is the maximum *allowable* length of that field – the data placed in that field must not be padded. Data fields with lengths exceeding the maximum length will fail validation checks and be rejected.

| Field Name | Max Length | Description | Blankable | Format |
|---------------------|------------|---|-----------|----------|
| SchemeOptionId | 10 | The CMS provided identifier for the scheme (and option if multiple options exist for a scheme). | N | Numeric. |
| SchemeBeneficiaryNo | 40 | The Scheme's internal unique identifier for this beneficiary. This | N | Text. |

| Field Name | Max Length | Description | Blankable | Format |
|-----------------------|------------|--|-----------|-------------|
| | | number <i>must</i> uniquely identify the beneficiary within the scheme and must differentiate between dependents within the same membership. | | |
| FamilyId | 40 | Any alphanumeric string that uniquely identifies this beneficiary's family (or membership group) from other memberships within the same scheme. | N | Text. |
| Action | 1 | Indicator of the scheme administrator's action for this beneficiary. Must be one of: New registration, Change notification, Terminated. | N | [N C T] |
| RefId | 16 | CMS assigned REF number. May only be empty when the action field is 'N' - indicating that this is a new registration. Once registered, include this ID when providing the CMS with membership termination or change notifications. | Y | Numeric |
| BeneficiaryEnrolled | 10 | The date when beneficiary was enrolled with the scheme. | N | Date. |
| EffectiveStartDate | 10 | The date when the beneficiary becomes/became eligible for coverage from the scheme. | N | Date. |
| BeneficiaryTerminated | 10 | Date when membership was terminated. Should be left blank unless the beneficiary is no longer covered by the scheme and the Action flag is 'T' - termination. | Y | Date. |
| SchemeOptionChanged | 10 | Date: Indicates when the Beneficiary changed from one option to another within the same scheme. This field should only be populated when performing a <i>change</i> operation (Action = 'C'). | Y | Date. |
| MembershipRelation | 1 | Indicates the relationship of this beneficiary relative to the primary membership holder. Must be one of: Primary, Spouse, Child, Dependent (other). If beneficiary is primary member then either the SAID or the Passport field must be populated. | N | [P S C D] |
| FirstName | 50 | Beneficiary's first name. | N | Text. |
| Initials | 6 | Beneficiary's middle initials. Punctuation OK. | Y | Text. |
| Surname | 50 | Beneficiary's surname. | N | Text. |
| Title | 4 | Beneficiary's preferred title. | Y | Text. |
| MaidenName | 50 | Beneficiary's maiden name if married. | Y | Text. |
| MaritalStatus | 1 | Marital status, one of: Single / Divorced / Married / Widowed / Cohabiting | N | [S D M W C] |
| Gender | 1 | Beneficiary's legal gender. One of Male or Female . | N | [M F] |

| Field Name | Max Length | Description | Blankable | Format |
|-----------------------|------------|---|-----------|-----------------|
| DOB | 10 | Beneficiary's Date of birth. | N | Date. |
| DOD | 10 | Beneficiary's Date of Death. Should only be populated during termination operation (Action = 'T') when the beneficiary has died. Leave blank during terminations if the beneficiary has merely left the scheme. | Y | Date. |
| SAID | 13 | RSA ID Number. If beneficiary is primary member (i.e. MembershipRelation is 'P') then either this field or the Passport field must be populated. Must contain no punctuation or spaces. | Y | [0-9] |
| Passport | 20 | Passport number if beneficiary is non-resident. | Y | [0-9] |
| PhysicalStreetAddress | 100 | Beneficiary's physical street address. | N | Text. |
| PhysicalSuburb | 50 | Suburb (or 2 nd address line of) beneficiary's physical address. | Y | Text. |
| PhysicalCity | 50 | City of beneficiary's physical address. | N | Text. |
| PhysicalPostalCode | 10 | Post Code of beneficiary's physical address. | N | Text. |
| PhysicalCountry | 3 | Abbreviated country code of the beneficiary's physical address. Use 'ZA' for South Africa. | Y | Text. |
| PostalPOBox | 100 | P.O. box number (or 1 st address line) of beneficiary's postal address. | Y | Text. |
| PostalSuburb | 50 | Suburb of beneficiary's postal address. | Y | Text. |
| PostalCity | 50 | City of beneficiary's postal address. | Y | Text. |
| PostalPostCode | 10 | Post Code of beneficiary's postal address. | Y | Text. |
| PostalCountry | 3 | Abbreviated country code of the beneficiary's postal address. Use 'ZA' for South Africa. | Y | Text. |
| HomePhone | 22 | Beneficiary's home phone number. | Y | Any Valid Phone |
| WorkPhone | 22 | Beneficiary's work phone number. | Y | Number. At |
| CellPhone | 22 | Beneficiary's home phone number. | Y | least one |
| Fax | 22 | Beneficiary's home phone number. | Y | phone number |
| Email | 100 | Beneficiary's Primary email address. | Y | must be |
| | | | | supplied! |
| | | | Y | Any valid |
| | | | | email |
| | | | | address. |
| TaxpayerNumber | 20 | Beneficiary's TaxPayer number, where available. | Y | Text. |
| PenaltyLevel | 4 | Indicates whether, and if so how much, of a late joiner penalty which has been imposed on this beneficiary. Must be one of: 0.0 (for no penalty) 0.05 | N | Numeric. |

| Field Name | Max Length | Description | Blankable | Format |
|-----------------------|------------|--|-----------|--------|
| | | 0.25 | | |
| | | 0.5 | | |
| | | 0.75 | | |
| PenaltyStartDate | 10 | The date when the late joiner penalty was first imposed. | | Date |
| WaitingPeriod | 10 | The date when the beneficiary first qualifies for full benefits - in other words - the date when any general waiting period imposed on the beneficiary ended. Blank this field to indicate no waiting period was imposed on the beneficiary. | Y | Date |
| SpecificWaitingPeriod | 10 | Date when the condition specific waiting period ends for this beneficiary. Leave blank if no condition specific waiting period is/was imposed on this beneficiary. | Y | Date. |
| SpecificWaitCondition | 100 | Description of condition/s for which condition specific waiting period was/is imposed. Leave blank if no condition specific waiting period is/was imposed on this beneficiary. | Y | Text. |

5.3.2 Special Fields

The beneficiary registration file contains several special fields which will assist administrators in reconciling a response file with the submitted file.

The field *SchemeBeneficiaryNo* may be any alpha-numeric string, assigned by the administrator, which uniquely identifies the beneficiary. This string is returned in the response file, and may be used to link the response record back to the original beneficiary record within the administrator's membership IT system.

Where administrative IT systems do not carry unique identifiers for dependents of primary members, the CMS suggests concatenating the membership number and the dependent code to create a unique *SchemeBeneficiaryNo*.

Many data fields, like home phone number, physical address, etc. are not captured for dependents of primary members. Where these details have not been captured for the dependent, simply submit the address and home-phone number for the primary dependent.

| | |
|--------------|---|
| NOTE: | <i>Do not</i> copy information which is unique to the primary member, like CellPhone number, SAID number, Passport, Date of birth, etc. for dependents if those details have not been captured. |
|--------------|---|

South African ID numbers are often not available for dependents of primary members. Do not fabricate ID numbers for dependents where a genuine SA ID number has not been captured – the Registry validates ID numbers and rejects false or incorrect numbers.

The PhysicalSuburb field may be left blank if the beneficiary has only a street, city and postcode address. Care should be taken to *not* submit city information in the suburb field or vice versa. The PhysicalCity field may not be left blank (even if suburb information is provided). Where the PhysicalCountry field is left blank, it is inferred that the country is South Africa.

5.4 Registration Response File

Beneficiary Registration Response files will generally follow the naming convention of the submission file to which they are responding, but will contain the extension “.RRF”. For example, a response to a submitted registration file named:

OldMutualQ1-06.BRF would be OldMutualQ1-06.RRF

5.4.1 Registration Response File Format

| Field Name | Max Length | Description |
|---------------------|------------|--|
| LineNumber | 10 | The line number of the row to which this response correlates. |
| SchemeOptionId | 10 | The CMS provided identifier for the scheme (and option if multiple options exist for a scheme). |
| SchemeBeneficiaryNo | 40 | The scheme's internal identifier for the beneficiary. This field is copied as-is from the submission file. |
| ResponseCode | 8 | Indicates whether or not the data for this beneficiary was accepted by the CMS, along with (if rejected) reasons for rejection. See below. |
| RefId | 16 | CMS assigned REF number. When new members are registered, the CMS generates this unique life-time number and returns it to the scheme. |

The registration response file provides per-line item feedback for the data submitted in the beneficiary registration file. The RefId field is always populated when the results are successful (i.e. a beneficiary is or has previously been registered). The line-items in the response file have a many-to-one relationship with the line-items submitted in the beneficiary registration file – meaning that (if a submitted line item is rejected) multiple Response Codes for the fields found to be in error may be returned.

5.4.2 Registration Response Codes

All response codes are 5 characters in length, in the format AANNN, where A is a letter and N is a number. The first character will always stipulate the type of response code and the second character the area of impact.

| 1st character | Description |
|---------------|-------------|
| A | Accepted |
| R | Rejected |

2nd Character Response Code Legend:

| 2nd character | Description |
|---------------|----------------------------------|
| A | Address |
| B | Date of birth |
| X | General / Data formatting |
| C | Data Change Operation |
| D | Date |
| E | E-mail |
| F | Financial information |
| G | Gender |
| I | Identity number |
| L | REF registration |
| M | Membership |
| N | Number |
| P | Personal information |
| U | Updated data |
| H | Forcibly/Compulsory un-enrolment |
| V | Voluntary un-enrolment |
| T | Transfer |

5.4.3 Registration Response Code Listing

| Code | Description |
|-------|---|
| AL001 | Registration of a new beneficiary on the registry accepted. See REF Identity field for the beneficiary's new unique CMS assigned identifier |
| AV001 | Beneficiary successfully un-enrolled. |
| AU001 | Alteration of the registered beneficiary's data accepted. |
| AT001 | Beneficiary successfully transferred to new option / scheme. |
| AC001 | No data changes were detected for the registered beneficiary. |
| AH001 | Beneficiary has been forcibly un-enrolled in response to external data supplied to the CMS. |
| RX100 | The entire row of data submitted contained an incorrect number of columns, was unreadable or contained values with more than the allowable number of characters for that field. |
| RX200 | The data provided has triggered an error of a type of a type not specified in this document. |
| RX002 | The beneficiary already exists on another scheme. |

| Code | Description |
|-------|---|
| RX003 | The beneficiary already exists on a different option of the scheme. |
| RX004 | The REFID provided for a change or termination operation was invalid. |
| RX005 | The beneficiary has either been previously un-enrolled from this option, or was never registered to the given option. |
| RU001 | Alteration of the registered beneficiary's data not accepted - resulting changes would cause a duplicate registration to exist. |
| RA002 | A required address field was missing or invalid. |
| RA003 | The beneficiary's physical street name was missing or invalid. |
| RA004 | The beneficiary's physical city name was missing or invalid. |
| RA005 | The beneficiary's postal code was missing or invalid. |
| RA006 | The beneficiary's country code was missing or invalid. |
| RB001 | The beneficiary's date of birth was missing or invalid. |
| RB002 | The date of birth of the beneficiary is incorrect as per the first 6 digits of the SA identity number. |
| RD001 | A required date field was invalid. |
| RD002 | The enrolment date of the beneficiary was invalid. |
| RD003 | The date on which effective membership started is not valid. |
| RD004 | The beneficiary cannot be un-enrolled without a termination date. Please retry the un-enrolment with a valid date in the field "BeneficiaryTerminated" |
| RD005 | One of more of the optional date field was populated, but contained an invalid date or was not correctly formatted. |
| RD006 | Scheme option changed date is set but the beneficiary has not previously not been registered |
| RD008 | The SchemeOptionId has changed but the SchemeOptionChanged date field is not present. A SchemeOptionChanged date must be specified whenever a beneficiary changes schemes. |
| RD009 | The date of death specified occurs before either the date of birth or the effective start date of the beneficiary. |
| RD010 | The date of death was provided, but the member has not been terminated and/or not BeneficiaryTerminated date was provided. A beneficiary must be terminated when the DOD field is populated. |
| RD013 | The BeneficiaryTermination date is populated, but the Action field was not set to 'T' (terminate). |
| RD014 | The Action field is set to 'T' (terminate) but the BeneficiaryTerminated field was not populated. |
| RM001 | Beneficiary is enrolled as part of a family / membership which has no primary member. |
| RN001 | The scheme beneficiary membership number is missing. |
| RN003 | The SA identity number already exists for another beneficiary on the registry. |
| RN004 | The beneficiary's telephone number is not valid for South Africa and this person resides in South Africa. |
| RN005 | One or more phone numbers were incorrectly formatted or are invalid. |
| RN006 | At least one phone number must be submitted for every beneficiary. |
| RP001 | The first name or surname field is missing. |
| RP002 | The family identifier code is missing. |
| RP003 | The beneficiary's relation to the principle member was missing or invalid. |
| RP004 | The beneficiary who is being registered has previously been declared deceased. |
| RP100 | All codes beginning with RP1 indicate that the REF system has determined that the beneficiary being registered already exists on the Ref system and is currently actively registered to a scheme. While more RPlxx codes may be used between this document's date of publish and the initial implementation of the REF system, the codes below reveal some of the checks which will be performed. |
| RP199 | |
| RP101 | The first name, surname, date of birth of the beneficiary already exist for another beneficiary on the registry. |
| RP102 | The first name, surname and address of the beneficiary already exist for another beneficiary on the registry. |
| RP103 | The first name, surname, phone number home, phone number work and cell phone number of the beneficiary already exist for another beneficiary on the registry. |
| RP104 | The date of birth, first name, REF number, SA Is number, address and phone |

| Code | Description |
|-------|--|
| RP200 | number of the beneficiary is the same as for another beneficiary on the registry but the surname is different. Beneficiary Data incongruent with previously collected data or other known facts. Please call CMS for details. |

5.5 REF Risk Factor Submission File

As with beneficiary registration file, submission files may be given any preferred filename, but must end with the extension “.QSF”

5.5.1 REF Risk Factor Submission File Format

| Field Name | Max Length | Description | Blankable | Format |
|----------------|------------|--|-----------|---|
| SchemeOptionId | 10 | The CMS provided identifier for the scheme (and option if multiple options exist for a scheme). | N | Numeric |
| RefId | 16 | The CMS assigned REF number for the beneficiary for which this REF Risk Factor is being submitted. Must contain the original punctuation markings as it appeared in the registration response file. | N | Numeric |
| Period | 10 | Date, indicating the last day of the month for which treatment of the REF Risk Factors below is being stated. | N | Date |
| RRF | 3 | A three character code indicating the treatment of a particular REF Risk Factor for this given beneficiary. May be one of: ADS, AST, BCE, BMD, CHF, CMY, COP, CRF, CSD, DBI, DM1, DM2, DYS, EPL, GLC, HAE, HYL, HYP, IBD, IHD, MSS, PAR, RHA, SCZ, SLE, TDH, HIV, MAT | | [ADS AST BCE BMD CHF CMY COP CRF CSD DBI DM1 DM2 DYS EPL GLC HAE HYL HYP IBD IHD MSS PAR RHA SCZ SLE TDH HIV MAT] |

The REF Risk Factor submission file contains a line item for each REF Risk Factor, for each beneficiary, for each month in which treatment of a chronic disease was provided for the given beneficiary.

If no treatment was provided to a member in a given month then no record should exist; only include records for those beneficiaries for whom treatment was actually provided. All registered beneficiaries are, by default, assumed to have no REF Risk Factor conditions until such time as a record is detected indicating treatment for one or more REF Risk Factors.

5.6 REF Risk Factor Response File

The REF Risk Factor Response file always contains the same name as the submission file to which it pertains, but will have a “.QSR” extension.

5.6.1 REF Risk Factor Response File Format

| Field Name | Length (max) | Description |
|----------------|--------------|--|
| LineNumber | 10 | The line number of the row to which this response correlates. |
| SchemeOptionId | 10 | The CMS provided identifier for the scheme (and option if multiple options exist for a scheme). |
| ResponseCode | 8 | Indicates whether or not the data for this beneficiary was accepted by the CMS, along with (if rejected) reasons for rejection. See below. |
| RefId | 16 | CMS assigned REF number, as it appeared in the submitted file. |
| RRF | 3 | The REF Risk Factor code, as it appeared in the submitted file. |
| Period | 10 | The REF Risk Factor period, as it appeared in the submitted file. |

A REF Risk Factor Response file is returned to a Scheme Administrator for every REF Risk Factor submission file that was submitted to the CMS. The file will contain 1 or more response line-items for every line item of data submitted to the CMS.

5.6.2 REF Risk Factor Response Codes

REF Risk Factor Response Codes, like beneficiary response codes, are always 5 characters in length – the first 2 characters always alphabetical, the remaining three always numeric. The first character of the code always reveals whether the line items was accepted or rejected:

| 1st character | Description |
|---------------|-------------|
| A | Accepted |
| R | Rejected |

The second character provides a general area of focus for the response:

| 2nd character | Description |
|---------------|---|
| A | Accepted (no error). |
| F | Data Formatting Error. |
| C | Combination of REF Risk Factors is invalid. |

5.6.3 REF Risk Factor Response Code Listing

| Response Code | Description |
|---------------|--|
| AA000 | REF Risk Factor submission for beneficiary & period accepted. |
| RF100 | The entire row of data submitted contained an incorrect number of columns, was unreadable or contained values with more than the allowable number of characters for that field. |
| RF101 | The period field was not formatted correctly. |
| RO101 | The REFID provided was not a valid REFID for any known beneficiary. |
| RO102 | The REFID provided refers to a beneficiary that is/was not registered to the given option for the given period. |
| RO103 | The RRF condition maternity may not be claimed for a male beneficiary |
| RO104 | The RRF condition Bipolar Mood Disorder is invalid for beneficiaries younger than 16 years of age |
| RO105 | The RRF condition Cardiomyopathy is invalid for beneficiaries younger than 20 years of age |
| RO106 | The RRF condition Chronic Obstructive Pulmonary Disease is invalid for beneficiaries younger than 20 years of age |
| RO107 | The RRF condition Coronary Artery Disease is invalid for beneficiaries younger than 16 years of age |
| RO108 | The RRF condition Crohn's Disease is invalid for beneficiaries younger than 13 years of age |
| RO109 | The RRF condition Glaucoma is invalid for beneficiaries younger than 20 years of age |
| RO110 | The RRF condition Multiple Sclerosis is invalid for beneficiaries younger than 13 years of age |
| RO111 | The RRF condition Parkinson's is invalid for beneficiaries younger than 20 years of age |
| RO112 | The RRF condition Systemic Lupus Erythematosus is invalid for beneficiaries younger than 13 years of age |
| RO113 | The RRF condition Schizophrenia is invalid for beneficiaries younger than 16 years of age |
| RO114 | The RRF condition Ulcerative Colitis is invalid for beneficiaries younger than 13 years of age |
| RC110 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Please check the CMS REF guidelines for details on mutually exclusive REF Risk Factor combinations. |
| RC101 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Only one of Chronic Obstructive Pulmonary Disease, Asthma and Bronchiectasis may be submitted in a specific period |
| RC102 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Only one of Cardiomyopathy and Cardiac Failure, Coronary Artery Disease, Dysrhythmia and Hypertension may be submitted in a specific period |
| RC103 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Only one of Chronic Renal Failure and Hypertension may be submitted in a specific period |
| RC104 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Only one of Crohn's Disease and Ulcerative Colitis may be submitted in a specific period |
| RC105 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Only one of Diabetes Mellitus 1 and Diabetes Mellitus 2 may be submitted in a specific period |
| RC106 | The given combination of REF Risk Factors for this beneficiary for this period is invalid. Bipolar Mood Disorder and Schizophrenia may be |

| Response Code | Description |
|---------------|--------------------------------|
| | submitted in a specific period |
