GENERAL NOTICE

NOTICE 72 OF 2009

Proposal 2009 – Invitation for submissions for RPL 2010

INVITATION FOR SUBMISSIONS

The Director General of Heath hereby invites submissions from all stakeholders contemplated in section 90(1)(v) of the National Health Act, 2003 (Act No. 61 of 2003). This invitation is in terms of regulation 2 of the Regulations Relating to the Obtainment of Information and the Processes of Determination and Publication of Reference Price List (GN R. 681 of 23 July 2007) and is aimed at the development of the reference price list (RPL) for 2010.

Submissions must be in accordance with the guidelines attached to this invitation and published as additional information to the regulation referred to above.

The information to be submitted relates to health financing, the price of health services, business practices within or involving heath establishments, health agencies, health workers or health care providers and is necessary for the development and publication of the RPL.

Two printed copies plus 1 electronic copy (compact disc) of the submission must be delivered at Room 823, 8th Floor Fedlife Building, c/o Prinsloo and Church, Pretoria before 15h00 on the 03 April 2009. No late submissions will be accepted. Due to the time constraints no extensions can be granted.

1. Background

1.1. Information that may be submitted

This information may include, but is not limited to-

1.1.1. Activity times for health services rendered within a health establishment, including surgical and medical procedures, which means the time required to complete the actual procedure or service;

1.1.2. overhead cost, i.e. the cost incurred in rendering a set of items included in a reference price list schedule;

1.1.3. labour cost, i.e. the cost of labour that can be traced to the provision of a reference price list item;

1.1.4. professional fees;

1.1.5. cost of medicines, scheduled substances and medical devices;

1.1.6. cost of maintenance of premises;

1.1.7. cost of consumables used in the delivery of health services;

1.1.8. security costs;

1.1.9. cost of foodstuffs for patients;

1.1.10. cost of services or products used to ensure patient safety;

1.1.11. cost of insurance related to the provision of health services;

1.1.12. details of persons or institutions providing services to, or at the establishment;

1.1.13. scales of benefits payable by medical schemes to the health to the health establishment;

1.1.14. occupancy rate, which is utilised capacity of a facility or equipment divided by the available capacity during the period under consideration;

1.1.15. non confidential information on the health establishment;

1.1.16. income and expenditure;

1.1.17. billing guidelines and rules where these exist;

1.1.18. waste management costs;

1.1.19. details of agreement with third parties; or

1.1.20. any other costs that are ordinarily incurred.

1.2. The information must-

1.2.1. be in accordance with the pricing methodology contemplated in 4 (2) in regulation 681 of 2007;

1.2.2. indicate cost parameters that are different in respect of different provider groups;

1.2.3. be comprehensive and provide for item codes and item type, where applicable;

1.2.4. provide for representative samples and how the sample sizes used have been calculated; and

1.2.5. include explanations for adjustments or assumption made in the cost of evaluations.

2. Who may make submissions

2.1. RPL submissions are expected to have gone through a rigorous peer review process prior to submission of the RPL. As a consequence of this and the fact that the RPL affects all providers in the relevant disciplines, submissions will not be accepted from individuals or individual companies.

2.2. Submissions will therefore only be accepted if they are received from a professional association representing the discipline concerned, or a statutory body established to regulate the relevant profession, provided that there are no legal impediments to the relevant bodies making the submission. Where several sub disciplines are represented by an umbrella professional association which provides an interdisciplinary peer review process, submissions must be made via that umbrella body.

2.3. The submissions made in 2008 for 2009 that were accepted, but are still are still in the process of verification should not make a submission for 2010.

2.4. Dental practitioners may not make submission as the engagement process with the Department of Health is ongoing. However, all dental specialist disciplines must participate in this invitation

3. Engagement with stakeholders

3.1. The Department of Health intends to make the RPL process inclusive by engaging all stakeholders.

3.2. The Department of Health respects the contractual arrangements between the Associations and their consultants. However, the Department of Health wishes at this point in time to state that all correspondence will be conducted with the relevant professional association, and not with the appointed consultants, or sub- groups. .

3.3. A briefing session will be held on the 6th February 2009 at the Department of Health, Impilo 1 boardroom at 9 o'clock with all interested parties.

4. Failure to make submissions

4.1. In those disciplines where reference prices are based on costing surveys, which have already been conducted, in the absence of new costing information inflation-linked adjustments will be made to prices.

5. Independence of consultants

5.1. Consultants commissioned by parties making submissions to the RPL to undertake costing surveys must be independent of the relevant association and profession. These consultants must be free from any interest and any business or other relationships, which could, or could reasonably be perceived to, materially interfere with the consultant's ability to objectively evaluate the costs associated with the relevant profession. A separate declaration of independence should be provided with each submission. Non-compliance with this requirement will result in rejection of submissions.

5.2. To the extent that any consultant has an interest or any business or other relationship with the relevant association or profession which that consultant or the party making the submission believes does not materially interfere with the consultant's ability to objectively evaluate the costs associated with the relevant profession, a full declaration of the interest or relationship must accornpany the submission.

5.3. Please note that if, notwithstanding such declaration, the RPL Advisory Committee considers the declared interest or relationship to materially interfere with the consultant's ability to objectively evaluate the costs associated with the relevant profession, the submission may be rejected on this basis.

5.4. All declarations of interest or relationship will be published on the Department of Health website.

5.5. Should any interest or relationship come to light subsequent to receipt of a submission, which ought to have been declared, this may result in rejection of the submission.

5.6. Previous acceptance of RPL submissions should not be construed as acceptance of the independence of the consultants concerned for purposes of the RPL 2010 process.

6. Verification of scope of practice

6.1 The stakeholder making a submission must warrant that the procedures listed in the submission fall within the scope of practice of the relevant profession, as determined by the relevant statutory council.

7. Verification and authenticity of survey results

7.1. The Director– General may request information for verification purposes. The verification may take various forms such as visits to selected surveyed practices to verify the submitted information.

7.2. The RPL review process will focus on accuracy and authenticity of costing surveys and submissions. Submissions will only be accepted on the basis that-

7.2.1. All information pertaining to the process will be made available to parties appointed by the Department of Health to verify the process;

7.2.2. Practices participating in the cost surveys must be willing to allow such parties to visit their practices and gain access to their financials and non-financials to verify the information provided for the costing surveys. Failure to provide this information timeously may result in rejection of the submission.

7.2.3. The full source data of individual practice information must be provided as part of the costing submission. For purposes of the submission, the individual practices should not be identified. However, for verification purposes, parties making submissions must be willing to identify all practices listed in the database. This identification will information will be treated confidentially .

7.2.4. Where any adjustments are made to cost survey results prior to submission for any reason, such as assumed error or implausibility of results, all such adjustments and the motivation thereof must be made explicit in the submission together with the original data.

7.2.5. Should any material misrepresentations of data come to light at any stage of the evaluation process, such data will not be accepted, and the submission may be rejected on this basis.

8. Non-proprietary nature of submissions

8.1. The RPL is a government driven process and all information in that regard will be in public domain publication, to be freely used by any stakeholder. Therefore the RPL process and all submissions related to this process will not include any structural components over which any person or body holds copyright or any other form of intellectual property.

8.2. Every submission must be accompanied by a written guarantee that

8.2.1. Publication of the RPL based on the proposals made in the submission will not constitute an infringement of copyright held by any party, and will not require any licensing agreements or royalty payments;

8.2.2. Parties making use of the RPL through software systems which facilitate billing between medical schemes and providers, or reproducing the RPL to publicise the benefits offered by medical schemes will not be an infringement of copyright, and will not require any licensing agreements or become subject to any royalty payments;

8.2.3. By using the proposals made in the submissions, the RPL will not be restricted by any intellectual property interest or proprietary restriction from maintaining or altering the relevant portion of the RPL; and

8.2.4. The party making the submission indemnifies the RPL for any claims or damages arising from undisclosed intellectual property violations arising from implementation of the proposals in their submission.

9. New technology

9.1.1. Requests for new technology codes may be subjected to a health technology assessment (HTA) process by the Department of Health, directorate Health Technology unit, and their inclusion in the RPL may be suspended pending the outcome of such process.

9.1.2. HTA reviews will be facilitated by the provision of comprehensive information relating to HTA assessments conducted internationally and locally, including but not limited to scientific literature on the new technology, information relating to the need for the introduction of such technology and the projected utilization in South Africa

10. Exceptional Situations

10.1. It is acknowledged that the costing methodology described in this document may not necessarily be suitable for all health care disciplines or service environments. Any modifications to the methodology may be appropriate but the Department of Health must be informed of such process, for example, in relation to private hospitals, pathology laboratories and emergency services.

10.2. If an intended costing methodology deviates substantially from the methodology documented here, then the parties and the Department of Health , in consultation with the provider group will develop an appropriate costing methodology.

11. Publication of Submissions

All submissions shall be published for general information and comment on the Departmental website.

Any information regarded as confidential must be clearly identified in the submission to prevent publication of this information and contravening the competition Act, proprietary information etc. failure to clearly identify this information could result in publication of the information, and the Department of Health wishes to state that no responsibility can be accepted for submissions where this aspect is ignored.

All comments must be delivered to Room 823, 8th Floor FedLife Building, c/o Prinsloo and Church, Pretoria within thirty days of the date for publication of the submiited information before 15:00.

The comments should be submitted by providing two paper copies of the comments, and an electronic copy on compact disc.

12. Contact Person

Any enquiries regarding the submissions must be directed to Mr S Jikwana at

(012) 312 0669 or on e-mail address jikwas@health.gov.za.

GUIDELINES

FOR

REFERENCE PRICE LIST 2010

Reference Price List Guidelines

1. Introduction

The Reference Price List (RPL) is primarily a set of items (procedure codes) with corresponding reference prices. The underlying principle to the approach for reference pricing is that the cost of providing the particular service must be made explicit, and that this cost forms the basis of the reference price.

In order to apply this principle certain preconditions must be met:

1.1. a standard nomenclature must exist to identify the service being priced; and

1.2. an agreed upon methodology to determine the reference price associated with a particular service.

2. The pricing methodology depends on the following assumptions:

2.1. A particular reference fee schedule is determined for a well-defined and relatively homogeneous provider group;

2.2. Cost parameters will be different for different provider groups – this may be the case even if the level of remuneration for professional time is the same between groups;

2.3. Reference price components will be based on country-wide averages, with the result that actual price components will differ geographically, and will depend on individual practice efficiencies and practice specific factors.

2.4. Standard nomenclature

The reference price list consist of a list of items (fees, tariffs), where each item represents a particular service provided by the provider group to which the reference price list apply. This list of items must comply with the following general requirements:

2.4.1. *comprehensiveness* – the list should provide for all the recognised services (accepted practice) rendered by the provider group to which it applies;

2.4.2. *consistency* – there should be no duplication or overlap between items in the list;

2.4.3. *systematism* – the list should reflect the basic organising concepts used by the provider group, such as anatomical regions and/or treatment modality; as far as possible each item should be a complete unit of service, with minimal use of modifiers or add-on items.

2.5. A reference price list item consists of the following components:

2.5.1. *Schedule* – a schedule contains the price list items applicable to one or more provider groups;

2.5.2. *Provider group* – a professional group or sub-group (discipline, sub-discipline) or health service provider category to which a particular schedule applies;

2.5.3. *Item code* – a numeric code that is unique to a particular schedule (the actual code length may vary by schedule, up to a maximum of six digits);

2.5.4. *Item type* – a one letter field used to indicate whether the item is an actual service item, or a modifier, note or rule relating to the use of one or more service items;

2.5.5. *Item terminology/nomenclature* – a brief written definition of the price list item (each item must have a terminology);

2.5.6. *Descriptor* – a written narrative that provides further definition and the intended use of the item (optional);

2.5.7. *Relative Value Unit (RVU)* – a numeric value that expresses the value of this item relative to all the other items in the schedule, and is multiplied by a Rand Conversion Factor (RCF) to obtain the price of the item (RVUs can vary by provider group for each item in a schedule);

2.5.8. *Benefit Factor* – in general all items in a reference price list will have a benefit factor of 1, but health care funders may negotiate with individual health care providers to vary this factor in order to reimburse by agreement either above or below the reference price for an item.

3. Pricing Methodology

3.1. Introduction

The basic formula for calculating a service price is the cost of providing the service plus a profit component that is based on a return of investment rate on operating expenses (Figure 1).

Figure 1 : Item Price Components

The justification for the profit component is based on the following:

- Provision needs to be made for the growth and development of the health care practice, particularly in the light of rapidly changing health care technology and knowledge.

- The return on investment component represents the expectation of a return by a hypothetical investor in a health care practice. For the purposes of the reference price list, return on investment will be based on the bankers' acceptance rate. Individual practices would normally adjust this rate by taking into account the risk profile of the practice.

3.2. Item cost

Item cost in turn is based on the cost of the direct labour and material used in providing the service represented by the fee item, plus an allocated portion of the overhead costs of the practice (Figure 2).

Figure 2 : Item Cost Components

3.2.1. Direct Labour.

This is the cost of labour that can be directly and conveniently traced to the provision of the service represented by the particular fee item. Direct labour cost is based on the duration of time spent by the health care provider in performing the service.

3.2.2. Direct Materials.

Significant materials used (consumed) in providing the service that can be conveniently traced to it. Minor materials (e.g. swabs, etc) are best handled as indirect materials and accounted for as part of the allocated overheads. In practical terms, direct materials are those materials consumed in the practice that can be recovered from the patient as part of a specific chargeable procedure as direct materials. Indirect materials are those materials that cannot be charged for in addition to a procedure and their cost is allocated to overheads.

3.2.3. *Allocated overhead costs.*

All of the costs associated with providing the total set of services rendered by the health care practice that are not part of direct labour or material are allocated to each service through a specific allocation mechanism.

4. Guidelines for Calculating Direct Labour Costs

4.1. Appropriate professional remuneration.

The expected annual remuneration of health care providers used in the calculation of direct costs will be based on the salary packages paid in the public sector for equivalently qualified health care providers. As a general rule the package value of the experience in the public service at the upper end of the applicable scale will be used in the calculations.

4.2. Composite direct labour costs.

A particular service item may have direct labour components relating to more than one health care provider, e.g. a radiology procedure with direct cost components for the radiographer and radiologist.

4.3. Adjustment for complexity of procedures.

Appendix B presents a method to calculate the relative value units of a fee item to take the relative complexity of different procedures into account. The method involves the calculation of responsibility values relative to a standard procedure. The service's unit value (usually duration expressed in minutes) of the fee item is then multiplied by the responsibility value to obtain the relative value unit for the item. If this method is used the direct labour rate (rand conversion factor) must be adjusted to bring the total direct labour cost back to the target amount. This will have the effect that the practitioner doing a normal distribution of items across the different responsibility values (complexity) will earn the target professional remuneration. If on average more complex procedures are done, the remuneration will be correspondingly higher. If a provider group elects not to use this mechanism then relative value units will simply be based on the average duration of the fee item (if the allocation unit is minutes).

4.4. Productivity factors

The adjustment of the standard volume with a productivity factor is done in recognition of the fact that health care providers can not be productive every minute of the available time, because of situations such as patient turnover, travel between places of work, meals, equipment breakdown, etc. The productivity factor used in submissions must be substantiated through representative time studies where it deviates from the default 75%.

5. Overhead costs

Costs included as overheads.

5.1. All non-manufacturing costs and manufacturing costs that are not classified as being direct labour or direct materials, are allocated to manufacturing overheads (Table 1).

5.1.1. *Manufacturing costs other than direct labour or direct materials.*

- Indirect Labour. That labour cost that cannot be physically traced to the creation of products, or that can be traced only at great cost and inconvenience.

- Indirect Materials. Small items of materials that may become an integral part of the finished product, but that may only be traceable into the product at great cost and inconvenience. In practical terms indirect materials are those materials consumed in the practice that cannot be recovered from the patient as part of a specific chargeable procedure of service (item).

5.1.2. *Non-manufacturing costs.*

These consist of marketing or selling costs, and administrative costs. Although all practices have non-manufacturing costs, this forms only a small percentage of the total cost of most practices. The cost of a receptionist would most probably be the major expense in this category. Many receptionists are utilised for "manufacturing" functions as well, for example, ordering of materials and supplies, sterilisation of instruments, which further decrease the true proportion of non-manufacturing costs. The cost and inconvenience for a practice to trace these costs to separate cost categories are not worthwhile, and all non-manufacturing costs are thus assigned to manufacturing overhead.

5.2. Overhead costs must be classified according to the schedule given in Table 5 below. Specific provisions are:

- All costs must be VAT exclusive.

- Bad debt provisions will be limited to 2.5% of total revenue.

- The average size of practices in square meters must be provided as well as an average rental fee per square meter. Where practice premises are subsidised, the subsidised cost should be reflected and not the market related cost of the space.

- Where consumables are charged as direct costs using a medication or materials item (e.g. the 'Setting of a sterile tray' code for medical practices) the cost of such consumables should not be included as part of overheads.

- Where a surcharge exists for rendering services away from the usual place of service (e.g. as is the case in the medical practitioner schedule) transport costs cannot be included as part of overhead costs as this will amount to double recovery of such costs.

Table 1 : Overhead Cost Examples

Category		Include	Exclude
1. Personnel costs			
1.1	Indirect labour costs	Salaries and wages of all practice staff	Salaries and wages included in direct labour costs
1.2	Salary related levies & taxes	UIF, Skills development levies, Regional service council levies	Sickness benefit insurance, catered for in sick leave inclusion in direct labour standard volume calculation
1.3	Professional dues & continuing education	Professional association membership fees Professional council fees Continuing education related expenses	
1.4	Protective clothing and uniforms	The cost of protective clothing of staff as well as cleaners and general workers. The costs of uniforms if not included as an allowance	Gloves and masks if included under 6. The costs of uniforms if included as a salary allowance
2. Premises			
2.1	Rental of space	The actual cost should be reflected and not the market related cost of the space	Rental subsidies or rebates
2.2	Building maintenance & repairs	The general cost of repairs and maintenance of the buildings.	Any cost of a capital nature, such as improvements of the buildings and infrastructure
2.3	Services	Electricity, water & cleaning services	

Category		Include	Exclude
2.4	Medical waste removal	Cost of containers for the storage of medical waste. Removal cost of medical waste. Disposal cost	Container costs included under 6.
2.5	Security	The cost of a security system. The cost of an armed response service	
3. Practice Management & Administration			
3.1	Accounting, audit and management fees	Accounting fees paid to an external accountant or accounting practice. Bookkeeping fees paid to an external bookkeeper. Management and admin fees paid to an external business rendering these services. Auditor's fees	
3.2	Advertising & marketing	Promotions, donations & sponsorships. Brochures. Other media advertising or marketing activities. Business related entertainment	
3.3	EDI and medical scheme administration fees	The levies for "Switch" services	
3.4	Software licensing & support	Software and/or the license fee of programmes Technical support	Computer equipment Internet connection fees ISDN or ADSL rental fees
3.5	Communication costs	Internet connection fees ISDN or ADSL rental fees Telephone, fax and cell phone costs Lease cost of a telephone (communication) system	Costs of a personal nature
3.6	Legal expenses	General legal fees Labour law and IR consultation fees	Legal fees associated with the collection debts.
3.7	Postage and courier services	Stamps and registered letters. Courier services. Post box rental	

Category		Include	Exclude
3.8	Printing and stationery	The printing cost of administrative books, documents, forms and patient files used in the dental practice. Photocopy expense. General office stationery	Consumables if included under 6.
3.9	Transport costs	Average mileage per annum multiplied by the Automobile Association rate	When covered by specific fee items Personal use
4. Financing & Insurance costs			
4.1	Bank charges & interest	Bank charges and admin fees paid	Standard and special equipment financing costs
4.2	Credit card commission		Commission paid on non health related services
4.3	Bad debt costs	Calculated at fixed rate of 2.5% of turnover	
4.4	Practice risk insurance	Public liability insurance Insurance of the buildings if owned by the practice Insurance of vehicles if owned and used by the practice	Standard and special equipment insurance – automatically included in equipment cost calculation
4.5	Malpractice risk insurance		
6. Indirect material			Any material or consumables included as direct cost, or covered by material or medicine related fee items
7. Sundry expenses		If specified	If not specified
8. Equipment		Capital, insurance and maintenance costs provided for in equipment cost calculation	
9. Overhead recovered		Deduct	

6. Overhead Cost Recovery.

6.1. Any overhead costs recovered directly or indirectly (excluding services fees) from the patient or other parties must be deducted from the relevant overhead cost item. For example a cost of a telephone call charged to a patient, or subletting space or equipment.

6.2. Equipment.

The cost of equipment that is considered standard for a provider group should be included in overheads.

Special equipment (i.e. equipment used for procedures not considered to be standard practice for the specific provider group) should be considered as a separate cost centre and the cost of this special equipment included in the overhead costs of these procedures.

The cost of any piece of equipment that exceeds R15 000 must be substantiated by a sample of invoices or by at least three valid quotes from suppliers.

6.3. Standard Volumes.

In general standard volumes for overhead allocation should be calculated in the same way as for direct labour allocation, except that leave and sick leave can not be taken into consideration. Alternatively the productive minutes per annum for the equipment should be used.

Unrealistically low productive minutes per annum will not be considered. The benchmark productivity rate for special equipment will be 65%.

6.4. Overhead Cost Adjustment.

Overhead costs based on surveys will be adjusted to the bottom end of the 95% confidence interval, with margin of error of 10%, to increase the likelihood that the cost basis of the RPL is at least at the stated level. The confidence rate calculation and adjustment method is documented in the accompanying spreadsheet.

7. Direct Material

7.1. Mark-ups.

The following principles will be applied to the calculation of direct materials:

7.1.1. Mark-ups cannot be a source of income or profit.

7.1.2. Actual cost components of material handling should be quantified.

7.1.3. Emergency Medication.

Material/medication held for use in an emergency can be written off on acquisition and the costs included in general overheads.

8. Cost and Activity Times Surveys

Overhead cost and activity times for procedures must be on representative sample of actual practices. All submissions must show how the sample sizes used have been calculated. Low response rates are common in survey of this nature and over-sampling should be considered to address this problem. It is not possible to give minimum acceptable response rates, but consider that the confidence interval adjustment for overheads describe above will be correspondingly larger with a low response rate. Survey results will be subject to verification and the original survey data must be made available for scrutiny. Overhead totals of all responding survey practices must be made available to verify the confidence interval adjustment of the overhead costs.

8.1. Where high level surveys have shown significant variation in practice, stratified samples should be used to ensure adequate representation of the different practice types in the sample.

8.2. In general it is recommended that statistical advice be sought in the design of practice cost surveys. This particularly important for disciplines with a small number of practitioners.

9. Activity Times

9.1. Accurate service duration are vital components of proper costing studies. Appendix C gives guidelines for activity time determination. Whenever possible reference must be made to international benchmark times for equivalent procedures. Medical scheme data will also be used in the verification of theatres times

10. Basic Example

This is a basic example of the cost calculation for an item, with no direct material costs, where the basis of allocation is duration of the service expressed in minutes. Allocation on the basis of service duration (expressed in minutes) is commonly, but not exclusively, used in costing health services. Other allocation units include kilometres (patient transport) and bed days (hospitals). In the case of facilities bed capacity must be calculated on the basis of licensed beds.

10.1. Calculation of direct labour costs:

- Determine appropriate annual professional remuneration (PR).
- Determine standard volume (SV) for the allocation unit per year. The standard volume is the amount of the allocation base that should have been used to produce what was produced during the period (here a year) under consideration. This is not the actual amount used – that will depend on the relative efficiency of operations of a particular practice. In this case we will use the total available minutes per year by correcting for weekends, public holidays and leave (See the actual calculation in **Error! Reference source not found.**). In the case of time based allocation the standard volume is further adjusted by a productivity factor to account for unproductive time, such lunch breaks, time between patients, etc.
- Calculate the predetermined direct labour rate (LR) per allocation unit:

$$LR = \frac{PR}{SV}$$

- Multiply the predetermined direct labour rate (LR) with the average amount (A) of the allocation unit used by the service item (in this example duration in minutes) to obtain the direct labour cost (LC).

$$LC = LR \times A$$

10.2. Calculation of allocated overhead costs:

- Determine total overhead costs per year (O).
- Determine standard volume (SV) for the allocation unit per year. The process is the same as in 13.2.2 above.
- Calculate the predetermined overhead rate (OR) per allocation unit:

$$OR = \frac{O}{SV}$$

- Multiply the predetermined overhead rate (OR) with the average amount (A) of the allocation unit used by the service item (in this example duration in minutes) to obtain the allocated overhead cost (OC).

$$OC = OR \times A$$

10.3. Calculation of return on investment component

- Calculate mark-up (M) on operating overheads:

$$M = \frac{BA}{(1 - CR - ((1 - CR) * STC)) - BA}$$

Where:
CR = company tax rate and
STC = secondary company tax rate ,
BA= bankers' acceptance rate as published by the Reserve Bank.

- Calculate the annual return on investment (ROI) on operating expenses by multiplying the total overhead cost per year (O) with the mark-up on operating overheads:

$$ROI = O \times M$$

- Determine standard volume (SV) for the allocation unit per year. The process is the same as in 13.2.2 above.

- Calculate the return on investment rate (ROIR) per allocation unit:

$$ROIR = \frac{ROI}{SV}$$

- Multiply the return on investment rate (ROIR) with the average amount (A) of the allocation unit used by the service item (in this example duration in minutes) to obtain the allocated return on investment amount (ROIC).

$$ROIC = ROIR \times A$$

10.4. Basic Example Calculated

The basic approach given above is now used to calculate the fee for a 15 minute procedure executed by a single health care provider. This procedure has no direct material costs. The allocation unit will be minutes and the calculation of the standard volume in minutes per year is given in **Error! Reference source not found.**.

Table 2 : Standard Volume Calculation

Days in the year	365.25[1] days
Work days	
Minus weekends	-(2 x 52) = -104
Public holidays	-11
Annual holidays	-22
Sick leave	-8
Total days available	220.25 days
Minimum working hours per day	8 hours
Total available hours in a year	1 762
Base volume for direct labour (minutes)	105 720
Productivity factor for direct labour	0.75
Standard volume for direct labour (Actual available minutes)	**79 290**
Base volume for overheads (exclude leave & sick leave)	120 120