### MINIMUM BENEFITS FOR HIV/AIDS IN SOUTH AFRICAN MEDICAL SCHEMES

### By HD McLeod, Z Achmat and AM Stein

### ABSTRACT

This paper provides the results of a survey of the structure of HIV/AIDS benefits in open and restricted medical schemes in South Africa in 2002. The results of the survey were used to develop a series of recommendations to the Minister of Health in respect of the extent of prescribed minimum benefits for HIV/AIDS. Medical schemes are required to provide the PMBs to their members without limits or co-payments.

### **KEYWORDS**

Medical schemes; HIV; AIDS; benefits; prescribed minimum benefits

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### 1. INTRODUCTION

- 1.1 This paper provides the results of a survey of the structure of HIV/AIDS benefits in open and restricted medical schemes in South Africa in 2002. The survey was performed early in 2002 and information was provided direct by the medical schemes.
- 1.2 The results of the survey, which were presented at the annual healthcare convention of the Actuarial Society of South Africa in June 2002, were used to develop a series of recommendations to the Minister of Health in respect of the extent of prescribed minimum benefits (PMBs) for HIV/AIDS. The nature of existing coverage for PMBs was determined, as well as the extent to which PMBs have already been exceeded. This gave insight into the potential effect on the industry of extensions to PMBs proposed by the Minister during 2002.
- 1.3 The Minister had also requested input on a possible formulation for the inclusion of anti-retroviral (ARV) therapy in PMBs. The survey provided useful information on the existing coverage within schemes and enabled a strong recommendation to be made in this regard.
- 1.4 The paper begins with an outline of the policy and legislative framework for PMBs in medical schemes and describes the cover that must be provided for HIV/AIDS.

- 1.5 The coverage and results of the survey are discussed in sections 3 to 9. The framework of existing PMBs, proposed PMBs and possible extension of PMBs to ARV therapy is used to report on the results. Section 10 provides a framework for further research on HIV/AIDS benefits.
- 1.6 The authors comment on the findings of the survey and make recommendations with regard to benefit structures, the extent of PMBs and further research needed.

### 2. PRESCRIBED MINIMUM BENEFITS IN MEDICAL SCHEMES

### 2.1 POLICY FRAMEWORK FOR MINIMUM BENEFITS

2.1.1 In 2002, the Department of Health released a document (Department of Health, 2002), which contains a useful summary of the history of both the public and private healthcare sectors. The report explains that:

There was no regulatory supervision of the private healthcare system in South Africa prior to 1956, after which the schemes existing at the time became regulated as Friendly Societies. The Medical Schemes Act, No. 72 of 1967, created the regulatory framework for medical schemes, their supervision by the Department of Health (exclusively from 1975 onwards) and the requirement to provide statutory minimum benefits.

### 2.1.2 It records that:

The Browne Commission, which reported in 1986, recommended the removal of compulsory minimum benefits. The government at the time rejected these proposals on the grounds that 'otherwise those members who do not have minimum cover would simply turn to the State for assistance.'

### 2.1.3 It explains that:

The Medical Schemes Amendment Act, No. 23 of 1993, introduced far-reaching changes in legislation, including the removal of statutory guaranteed minimum benefits and guaranteed payment for claims. Schemes were able to exclude or limit cover for procedures at their own discretion.

### 2.1.4 It states that:

The 1995 National Health Insurance Committee of Inquiry recommended that the overall healthcare system should create a rational system of risk-sharing between as large a group as possible and, in the longer term, ensure the availability of a minimum level of cover for all within the public and private sectors.

### 2.1.5 It goes on to describe how:

The Medical Schemes Act, No. 131 of 1998, reintroduced prescribed minimum benefits as a policy instrument for defining minimum allowable levels of medical scheme cover.

2.1.6 The National Health Bill of November 2001 included in the purpose of the Act the establishment of:

a national health system which encompasses public, private and non-governmental providers of health services; and provides the population of the Republic with the best possible health services that available resources can afford.

This implies a conscious rationing of healthcare resources.

- 2.1.7 In March 2002, the Committee of Inquiry into a Comprehensive System of Social Security for South Africa (Department of Welfare, 2002), recommended the development of an effective policy process on defining and implementing basic essential services across the public and private sectors.
- 2.1.8 The report states that the public and private healthcare sectors need to provide a minimum core set of services. Within medical schemes these are regulated as PMBs. Within the public sector these are framed as minimum norms and standards.
- 2.1.9 The report recommends that, although these minimum services are defined differently in the public and private sectors, there must be convergence of the approaches adopted in the two environments and consistency with one another.

### 2.2 LEGISLATIVE FRAMEWORK FOR MINIMUM BENEFITS

- 2.2.1 The Medical Schemes Act (Act 131 of 1998), effective from 1 January 2000, regulates medical-scheme coverage for certain defined health conditions in terms of PMBs. The PMBs are set out in Annexure A to the regulations made in terms of the Act, as published initially on 20 October 1999¹ (the 1999 regulations) and subsequent amendments.
  - 2.2.2 The objective of specifying a set of PMBs is given in the 1999 regulations as:
- To avoid incidents where individuals lose their medical scheme cover in the event of serious illness and the consequent risk of unfunded utilisation of public hospitals.
- To encourage improved efficiency in the allocation of Private and Public health care resources.
- 2.2.3 The PMBs must be covered in at least one network of hospitals, which may include public-sector hospitals. Schemes may not impose financial limits on members for the cost of diagnosis or treatment of, or care for, the conditions covered by PMBs. They may make use of managed-care techniques such as pre-authorisation, the development of formularies and the use of restricted networks of providers in order to ration care.
- 2.2.4 Söderlund & Peprah (1998) suggested a minimum package in terms of diagnosis—treatment pairs. ICD-10 coding defined the diagnosis component of the pair, while the treatment component was defined according to CPT-4 codes.
- 2.2.5 The regulations governing the PMB package were published in 1999 with a significant change from the Söderlund-Peprah definitions. While the package was still defined by diagnosis—treatment pairs, the related ICD-10 and CPT-4 codes were omitted. This most affected the definition of treatment, as the codes were replaced with, for example, 'medical and surgical management'. The consequence of this is that a large degree of subjectivity in the decision-making on the implementation of PMBs has been introduced.
- 2.2.6 It is likely that more detailed descriptions of the PMB package will be developed in consultation with stakeholders over the next several years, as medical schemes, providers and members require greater clarity on these definitions.

<sup>1</sup> Regulations under the Medical Schemes Act (Act No. 131 of 1998), regulation no. R599, Government Gazette 407 no. 20061, 7 May 1999

- 2.2.7 Amendments to the regulations were published on 4 November 2002 (the 2002 regulations) with changes that include clarity on the provision of PMBs, the explicit inclusion of emergency medical conditions, the concept of a designated service provider and changes to the wording of 13 of the diagnosis—treatment pairs.
- 2.2.8 A number of stakeholders and actuarial advisers were under the initial misconception that PMBs were only hospital events. In the 2002 regulations the Minister of Health clarified that the standard of treatment required for PMBs was prevailing hospital-based practice, but that this should not be construed as preventing the delivery of any PMB on an outpatient basis or in a setting other than a hospital. The full text of this clarification is given in Appendix B of this paper.
- 2.2.9 PMBs have been significantly extended to cover the costs of diagnosis, treatment with chronic medicine and medical management in respect of a list of 25 defined conditions—the 'chronic disease list' (CDL) conditions—as from 1 January 2004. The major conditions include hypertension, asthma, diabetes mellitus and hyperlipidaemia. HIV/AIDS is not included in the list.
- 2.2.10 The Department of Health is required to monitor the impact, effectiveness and appropriateness of the PMB provisions. A review is to be conducted at least every two years by the Department, as set out in Appendix A. In particular, the reviews are required to focus on the development of protocols for the medical management of HIV/AIDS.

### 2.3 PRESCRIBED MINIMUM BENEFITS FOR HIV/AIDS

- $2.3.1\,$  The PMBs for HIV/AIDS in force from 1 January 2000 included only the treatment and management of opportunistic infections and localised malignancies. The description and explanatory text that applied to HIV/AIDS benefits is given in Appendix A.
- 2.3.2 Proposed amendments to the PMBs were published in the Government Gazette of 30 April 2002. These proposals (the proposed 2002 regulations) were open for comment for three months before determination by the Minister of Health and the final publication of the revised regulations on 4 November 2002 (the 2002 regulations).
- 2.3.3 The Minister particularly requested comment on the formulation of the PMBs and on the politically difficult issue of the inclusion of ARV therapy in the PMB definition. Given the need to ensure that minimum services are aligned in the public and private sectors, this raised politically sensitive issues.
- 2.3.4 During the consultation period, a number of organisations lobbied for the inclusion of ARV therapy in the definition of PMBs. However the final 2002 regulations were not substantially altered from the proposed 2002 regulations and ARV therapy remains excluded.
- 2.3.5 The 2002 regulations, which came into force on 1 January 2003, extend the PMBs to include a further package of benefits in respect of HIV/AIDS-related conditions. Cover must be provided for voluntary counselling and testing; treatment for tuberculosis, sexually transmitted infections and opportunistic infections, as well as pain management in palliative care. Significantly, the PMBs are extended to include the

prevention of mother-to-child transmission (MTCT) of HIV and post-exposure prophylaxis following sexual assault.

2.3.6 The Medical Schemes Act of 1998 requires community rating, thus schemes are prohibited from using age or health status as rating factors. In addition, the Act requires guaranteed acceptance, under which schemes are prohibited from underwriting members on entrance to the scheme, thus limiting discrimination on the basis of any medical condition, including HIV status.

### 3. SURVEY METHODOLOGY

- 3.1 Lodhia (2001) was a useful guide and reference, and its section on general employee benefits is helpful for future researchers. However, this survey differed from previous research in that it was based on option-level data rather than scheme-level data. A scheme may have some options that offer PMBs only and others that offer comprehensive HIV/AIDS benefits.
- 3.2 Previous research was based on scheme rules, marketing material having been available for only a few schemes. This survey is based on information supplied direct by schemes, supplemented by publicly available marketing material. The information is thus more accurate and more reliable.
- 3.3 A detailed questionnaire (see Appendix C) was sent to the principal officers of all the open, restricted and exempt schemes in operation in South Africa in 2001. Contact was made with all the HIV/AIDS disease management programmes to encourage the participation of their schemes in the survey.
- 3.4 Questionnaires were mailed to 168 schemes on 12 February 2002, using a list combined from the Government Gazette, Vol. 429, No. 22117, and the website of the Council for Medical Schemes. Extensive telephonic and electronic correspondence was undertaken by all three researchers to attempt to increase the response rate. In some cases schemes no longer existed and a total of 77 completed replies was received before the cut-off date at the end of April 2002.
- 3.5 A small number of schemes refused to complete the questionnaire. Attempts were made to source their benefits structures from the Council for Medical Schemes, but available scheme rules proved too difficult to interpret and were in some cases either vague or ambiguous.
- 3.6 Exempt schemes were subsequently excluded from the analysis as insufficient information was obtained to produce a reliable comparison. These schemes are exempt from the provision of PMBs and their benefit structures are typically based on primary care provided by staff or panel doctors.

### 4. COVERAGE OF THE SURVEY

- 4.1 Information on numbers of beneficiaries and benefit structures was obtained for 24 open and 53 restricted medical schemes. These 77 schemes offered a total of 221 options and were associated with 14 separate administrators. In the few cases where beneficiary numbers were not supplied, the latest figure from the scheme's statutory return to the Registrar was used. It is estimated that the 77 schemes together covered some 5 290 030 beneficiaries.
- 4.2 The question whether this represents adequate coverage of the industry was gauged using the latest available data from the Council for Medical Schemes, which at the time of the research was in respect of the year 2000. While it is acknowledged that the use of 2000 data to gauge the extent of reporting in 2002 is far from ideal, there was no other reliable or more recent source of industry data.
- 4.3 Table 1 shows the degree of coverage for the survey as a whole. It should be noted that the survey reports on open and restricted schemes, excluding the exempted schemes.
- 4.4 Scheme type is either 'open' or 'restricted', as set out in the Medical Schemes Act. In general, restricted schemes are employment-based and thus restricted to employees and retirees of a specific company or group. Open schemes must allow anyone who applies to become a member at standard rates.

	2002 HIV/AIDS Benefits Survey	Registrar's returns 2000	Estimated coverage					
Schemes	77	144	53%					
Options	221	407	54%					
Beneficiaries	5 290 030	6 579 986	80%					
Principal members (i.e. families)	Insufficient respondents available.	provided information, thu	s comparison not					

TABLE 1. Estimate of Survey Coverage

- 4.5 The criteria for small, medium and large schemes are defined by the Council for Medical Schemes in the Registrar's report for 2000 and are shown in Table 2. An additional category for ultra-small schemes is used at CARE.
- 4.6 The number of schemes gives the number of points of leverage in decisions about benefits. Information was obtained for 51% of the open schemes and 55% of the restricted schemes. The study covers 83% of large restricted schemes and 70% of large open schemes.

Ultra-small	Small	Medium	Large
fewer than 2 500 principal members	fewer than 6 000 principal members	6 000 or more principal members but fewer than 30 000 beneficiaries	30 000 or more beneficiaries

TABLE 2. Scheme size criteria

- 4.7 The number of options covered indicates the number of structures affected. The survey covers 52% of open scheme options and 58% of restricted scheme options in the market in 2000.
- 4.8 The most important criterion is the number of beneficiaries covered, as this is the number of people affected by benefit design decisions. The survey covers 75% of open-scheme beneficiaries and 94% of restricted-scheme beneficiaries.
- 4.9 The number of schemes and the number of options covered is not as complete as may be desired. However, since the beneficiary coverage is so extensive, the survey sample was accepted as a fair representation of open and restricted medical schemes in the South African market in 2002.
- 4.10 Coverage of small restricted schemes and that of small and medium open schemes was poor. While the authors do not have insight into the benefit structures of those schemes that did not reply to the questionnaire, they consider it likely that those schemes have poorer coverage of HIV/AIDS-related conditions than the schemes that did reply.

### 5. HIV/AIDS-BENEFIT MANAGEMENT

- 5.1 The 77 schemes analysed were divided into four categories according to the HIV/AIDS benefits provided and the way in which these are managed:
- schemes that provide no HIV benefits other than PMBs;
- schemes that provide additional HIV benefits but are not managed by any disease management programme;
- schemes that provide additional HIV benefits and are managed by Aid-for-AIDS, a programme regarded as the industry benchmark; and
- schemes that provide additional HIV benefits and are managed by another disease management programme, including their own in-house programme.
- 5.2 Aid-for-AIDS was developed by Medscheme Integrated Care, the managed care division of the largest medical scheme administrator in the market. Aid-for-AIDS is now a separate company providing HIV/AIDS disease management services by contract to medical schemes and employers in South Africa and other African countries. The other disease management programmes are either part of other administrators or their related managed-care organisations or are independently offering contracted services to medical schemes.

Other disease management

5.3 The results of this analysis are shown in Table 3.

ies

53.6%

36.3%

TABLE 3. Categories of HIV/AIDS benefits and benefit management

- 5.4 It was found that only 7 schemes, or 9,1% of schemes, were offering no benefits other than PMBs. It was gratifying to the authors to note that only 2,5% of beneficiaries belonged to these schemes.
- 5.5 Schemes have embraced the use of specialised disease management programmes for HIV/AIDS; 78% of schemes have done so, covering 86% of options and 90% of beneficiaries in the survey.
- 5.6 Disease management programmes were introduced in order to provide a comprehensive management approach for beneficiaries of contracted medical schemes. Members are typically required to register on the programmes in order to receive more generous benefits. In the case of HIV/AIDS, systems have been created within these programmes to ensure client confidentiality.
- 5.7 Disease management registration leads to better data collection on those lives and their drug-utilisation behaviour, thereby optimising cost-effectiveness. It may also act as an avenue for intervention on the part of the schemes.
- 5.8 Disease management programmes provide clinicians with information on current best practice for the treatment of each disease, within the parameters adopted by the scheme.
- 5.9 The Aid-for-AIDS programme is used to illustrate the typical scope of HIV/AIDS disease management. The objectives of the programme are:
- to provide managed access to ARV therapy;
- to facilitate access to benefits for the treatment of post-exposure prophylaxis (in the event of occupational injury or sexual assault);
- to provide therapy for the prevention of MTCT;
- to offer expert advice to the primary-care physician of the member's choice;
- to provide a comprehensive education and awareness programme to members and employee groups; and

- to assist with medication-related problems and lifestyle issues by means of nurse counsellors.
- 5.10 Disease management programmes can potentially improve cost-effectiveness. Specialist case management and treatment protocols have been found by Aid-for-AIDS to significantly reduce hospitalisation, outpatient and other medication costs.
- 5.11 At the time of the survey, there were seven disease management programmes in operation in South Africa, AccessHealth SA having begun marketing in 2002. They are shown in Table 4 with the proportion of schemes and members managed in each case. Newmed and Qualsa merged in 2002.

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Disease Management Programme	Percentage of schemes	Percentage of beneficiaries
Aid-for-AIDS	42%	36%
Calibre Consultants	5%	1%
Discovery Health	3%	20%
Lifesense	4%	8%
MX Health	3%	6%
Newmed	3%	7%
Other in-house	18%	9%
Qualsa	1%	2%

TABLE 4. Market penetration of disease management programmes

# 6. PARTICIPATION OF BENEFICIARIES IN HIV/AIDS DISEASE MANAGEMENT PROGRAMMES

- 6.1 Given South Africa's HIV prevalence rates, one of the most remarkable results of this research was the very low participation rate of beneficiaries in the HIV/AIDS disease management programmes.
- 6.2 This was gauged by comparing, in aggregate, the number of beneficiaries per option registered with the programme with the total number of beneficiaries in each of those options that provided this information. The results are shown in Table 5.
- 6.3 Many schemes refused to provide this information; information was provided for all schemes using the Aid-for-AIDS programme in totality. Results by scheme have been kept confidential.

	Percentage of beneficiaries
Open schemes excluding Aid-for-AIDS	0,15%
Restricted schemes excluding Aid-for-AIDS	0,21%
All schemes excluding Aid-for-AIDS	0,16%
All schemes including Aid-for-AIDS	0,42%
Best industry estimate	0,30%

TABLE 5. Beneficiaries participating in disease management programmes

- 6.4 Excluding Aid-for-AIDS, only 0,16% of beneficiaries that have access to disease management programmes are registered with these programmes. This is a disturbingly small proportion.
- 6.5 Aid-for-AIDS manages 79% of the 17 745 beneficiaries reported registered on disease management programmes. In total, including Aid-for-AIDS, 0,42% of beneficiaries that have access to programmes are registered on those programmes.
- 6.6 Evidence from key industry participants suggests that, in total, 22 500 beneficiaries are registered on programmes, which would be 0,30% of all beneficiaries in medical schemes. This is considered to be the best available estimate for the medical schemes industry as a whole.
- 6.7 Although there are no published data on the prevalence of HIV/AIDS within medical schemes, the percentage of beneficiaries participating in schemes' disease management programmes is unquestionably low. The restricted schemes' participation rates are slightly higher than those of open schemes.
- 6.8 The proportion of beneficiaries of medical schemes who may be HIV positive is estimated by Johnson and Dorrington (unpublished), to be of the order of 6% in 2002. Thus the finding that, in total, only 0,3% of all beneficiaries in the industry are registered on HIV/AIDS disease management programmes, reveals a serious problem.
- 6.9 It is of grave concern that members may have access to the services, treatments and therapies that medical schemes are offering, yet are not coming forward.
- 6.10 Research on SASOL, a company manufacturing fuel and chemical and related products and employing more than 26 000 employees in South Africa with a company-wide HIV sero-prevalence rate of 15%, indicates a very low take-up of the Aid-for-AIDS programme. Only one-quarter of the estimated number of HIV-positive employees have accessed the voluntary counselling and testing offered by the programme and only one-third of those who have tested positive have registered for the Aid-for-AIDS programme.

(Dickinson, 2002) This reinforces the findings of this research on the low registration and uptake of treatment programmes.

- 6.11 The authors suggest the following possible reasons for the low uptake of available treatment programmes, but stress that these require further investigation:
- Lack of information and inadequate marketing by medical schemes and disease management programmes of HIV and ARV benefits may account for some of the low uptake.
- Fear of stigma, discrimination and possible employment-related repercussions may constitute a significant barrier to the accessing of HIV/AIDS medical benefits and ARV therapy. Where medical scheme access is employment-related, fears of unlawful disclosure, stigma and discrimination could be stronger.
- Public confusion over the safety and efficacy of ARV therapy following the debates of the HIV denialists may be a factor.
- The cost to the member of accessing benefits is high. Research on the level of co-payments for medicines and diagnostics or perceived costs of accessing ARV therapy will indicate whether this constitutes a barrier to treatment.
- Many people with HIV/AIDS may delay access until they become significantly or terminally ill. Evidence presented by Aid-for-AIDS (Regensberg & Hislop, 2002) indicates that people wait until there is a significant health crisis before registering on the programme. Information on the benefits of early diagnosis, regular monitoring and appropriate ARV interventions will assist in this regard.
- 6.12 These problems could be overcome through research and a pro-active campaign to market HIV/AIDS benefits. Although this might cost the schemes more initially, the savings that will accrue from decreased morbidity and HIV prevention may be significant.

### 7. COVERAGE OF EXISTING PRESCRIBED MINIMUM BENEFITS

In the 1999 Regulations, the only HIV/AIDS benefit included in PMBs was the treatment and management of opportunistic infections and localised malignancies, consistent with prevailing medical practice in a public hospital. Opportunistic infections include *Pneumocystis carinii* pneumonia (PCP), tuberculosis and oral thrush.

### 7.1 COVER ONLY FOR PRESCRIBED MINIMUM BENEFITS

- 7.1.1 It was found that 33 options in 17 schemes provided only the PMBs for HIV/AIDS, with no additional benefits. These options represent 14,9% of options, but only 3,9% of beneficiaries and 3,0% of families respectively.
- 7.1.2 This implies that most of the options that offer only PMBs are relatively small. The families in question are also relatively large families. It was found that 24% of these options were restricted-scheme options and 76% were open-scheme options.
- 7.1.3 The figure of 3,9% of beneficiaries with only PMBs differs from the 2,5% of beneficiaries who belong to schemes that offer 'no additional benefit', shown previously. The reason for this is that in order for a scheme to be classified as offering 'no additional benefit,' every option in that scheme must offer PMBs only. The additional

1,4% of beneficiaries are from those schemes that have options that offer only PMBs as well as options that offer more extensive benefits.

7.1.4 The low numbers of families and beneficiaries that have access only to PMBs is gratifying. These figures emphasise the medical schemes' efforts to mitigate the effects of HIV and their continued acceptance of responsibility and support for their HIV-positive members. Trustees and schemes managers would seem to have realised that a proactive approach to treatment is cost-effective.

### 7.2 MEANS OF COVERING PRESCRIBED MINIMUM BENEFITS

- 7.2.1 All medical schemes in South Africa (with the exception of exempt schemes) are required by law to provide treatment for opportunistic infections as part of PMBs. Anecdotal evidence from schemes, trustees and administrators suggests that full implementation as required by the PMB legislation has not yet occurred.
- 7.2.2 The pattern of opportunistic infection cover for open and restricted scheme options was almost identical, the majority of options (71% of options in total) providing for opportunistic infections out of normal hospital cover. 58% of options provide for these infections out of chronic-medication cover and 56% out of a separate HIV cover. There is an overlap, many schemes using a combination of hospital cover, chronic medication cover and separate HIV cover to meet the PMBs.
- 7.2.3 Of great concern to the authors was the finding that 9% of options were covering opportunistic infections, either partially or completely, from members' medical savings accounts. It was found that 11 options were paying for opportunistic infections entirely from savings accounts.
- 7.2.4 As this was self-reported by the schemes, it indicates that some administrators and boards of trustees do not fully understand the legislation covering PMBs and have yet to take appropriate steps to integrate PMBs in the benefit structures of their schemes.
- 7.2.5 Schemes are required by the Medical Schemes Act to provide cover for PMBs with no limits. The 2002 regulations make it explicit that no scheme may use a member's savings account to cover a PMB condition.

### 8. COVERAGE OF REVISED PRESCRIBED MINIMUM BENEFITS

The 2002 regulations on PMBs include an extended package of benefits on the diagnosis of HIV/AIDS. These include voluntary counselling and testing; treatment for tuberculosis, sexually transmitted infections and opportunistic infections; pain management in palliative care; post-exposure prophylaxis for occupational injury and sexual assault; and intervention to prevent MTCT.

### 8.1 SUPPORT SERVICES

8.1.1 The inclusion of support services into HIV management programmes is fundamental. Since the disease is fuelled and exacerbated by lack of education and support systems, strong policies on prevention and education can greatly reduce the spread of the disease.

- 8.1.2 Risk-reduction strategies include correct and appropriate information and education, health and social support services (including counselling, testing and condom distribution) and non-discrimination towards people living with HIV/AIDS.
- 8.1.3 Education plays a key role in preventing new infections and reducing the impact of infections that have not been avoided. Education should also include an overview of the disease, the transmission of the virus, identification of the virus through symptoms, and what to do in the event of diagnosis.

		rr	
Scheme type	HIV counselling	HIV testing	Education and information
Open schemes	91%	76%	91%
Restricted membership schemes	76%	85%	90%
All registered schemes	86%	79%	91%

TABLE 6. Beneficiaries with access to HIV support services

- 8.1.4 Table 6 shows that medical schemes have embraced these support services as core responsibilities. 91% of beneficiaries have access to education and information and 79% have access to HIV testing. High access to these support services could be due to their low cost.
- 8.1.5 64% of options are providing all three support services. It was found that 13 % of options provide no cover for any support services. This translates into 29 options from 13 schemes.
- 8.1.6 The authors recommended to the Minister of Health that universal access to these support services should be provided in terms of PMBs. However, a nearly exclusive emphasis on prevention of the disease, with no access to treatment, is fatal for those already living with the virus.

# 8.2 TREATMENT AND PREVENTATIVE THERAPY FOR HIV-RELATED CONDITIONS

- 8.2.1 The PMBs place emphasis on counselling, testing for HIV and the treatment of people with HIV for opportunistic infections such as PCP and tuberculosis. This includes screening and preventative therapy for these conditions as well as the treatment of sexually transmitted diseases (STDs) such as syphilis and gonorrhoea.
- 8.2.2 The link between HIV and other STDs highlights the importance of treatment of STDs for infected and non-infected people. HIV-negative partners are more susceptible to contracting HIV if they have an STD, and HIV-positive partners are more infective if they have an STD.
- 8.2.3 The medical schemes were asked to provide details of coverage in four areas of preventative therapy. In summary, across all medical schemes:
- 84% of beneficiaries have access to screening for tuberculosis;
- 84% of beneficiaries have access to preventative therapy for tuberculosis;
- 87% of beneficiaries have access to preventative therapy for PCP; and

- 88% of beneficiaries have access to treatment for sexually transmitted diseases.
- 8.2.4 These results emphasise medical schemes' awareness of the impact of opportunistic infections on the body's immune system as a result of HIV, and that prevention of these infections lowers susceptibility to the virus. However, the authors recommended that universal coverage be provided in PMBs.

### 8.3 PREVENTION OF MOTHER-TO-CHILD TRANSMISSION

- 8.3.1 MTCT is the process whereby an infant contracts HIV from its mother before, during or after birth through contact with the infected mother's blood or through breast-feeding.
- 8.3.2 Research has shown that combination ARV therapy, a short course of AZT or a single dose of nevirapine to a pregnant mother and infant just before birth can significantly reduce or nearly eliminate paediatric infection. (Connor *et al*, 1994; Shaffer, *et al*, 1999; Guay, *et al*, 1999).
- 8.3.3 In the light of this, the government's decisions to deny prospective mothers access to ARVs on the grounds that the drugs are toxic, too expensive and management is difficult to implement, received much criticism. This resulted in litigation in the Pretoria High Court<sup>2</sup>, where the Treatment Action Campaign was successful in requiring the government to provide access to these ARVs to HIV-positive mothers and their children to prevent MTCT.
- 8.3.4 The government appealed to the Constitutional Court. On 5 July 2002, the Constitutional Court found that government policy was unreasonable and inflexible, and failed to meet the constitutional requirement to progressively realise access to health care.<sup>3</sup> The government is now required to lift the restriction on doctors in public facilities to prescribe Nevirapine to women with HIV, train counsellors and develop a comprehensive plan to extend the programme across the country.
- 8.3.5 Interventions that reduce vertical HIV transmission include substitution of formula feed for breast-milk and administration of ARV agents to mother and child around the time of birth.
- 8.3.6 Birth by Caesarean section has been shown to significantly reduce vertical transmission. While it is unclear how feasible elective caesarean sections are in areas with poor resources, they should routinely apply to HIV-positive women in private-sector medical schemes.
- 8.3.7 These interventions can lead to a reduction in HIV-related deaths and prevention of future HIV-related health costs. Medical schemes were asked which benefits were provided to prevent MTCT of the virus. In summary, across all medical schemes:
- 41% of beneficiaries have access to AZT only;
- 56% of beneficiaries have access to AZT and 3TC (also known as Combivir) or any other combination therapy;

<sup>2</sup> Treatment Action Campaign and Others v Minister of Health and Others. 2002 (4) BCLR 356 (T). 14 December 2001

<sup>3</sup> Unreported judgment Constitutional Court 5 July 2002

- 55% of beneficiaries have access to nevirapine;
- 84% of beneficiaries have access to a caesarean section;
- 47% of beneficiaries have access to formula feed; and
- 77% of beneficiaries have access to MTCT counselling.
- 8.3.8 When duplicate drug protocols are removed, it was found that 92% of beneficiaries have access to some form of ARV therapy to prevent MTCT.
- 8.3.9 In total, 73% of options (covering 83% of beneficiaries) provide caesarean section. However, only 47% of options (46% of beneficiaries) have access to formula feed, another benefit that could reduce transmission of the virus. To pay for a caesarean section but not provide formula feed after birth is short-sighted. Formula feed is medically indicated for women with HIV in resource-rich settings like the medical schemes environment.
- 8.3.10 In summary, these figures highlight the fact that the private sector has taken heed of the dangers of MTCT. 73% of all scheme options are offering three or more of the treatments to prevent vertical transmission of the virus.
- 8.3.11 It was found that 13% of options (representing 7% of beneficiaries) are offering no MTCT benefits at all. These 29 options are contained in 17 schemes. Thus the extension of PMBs in this area will represent a relatively small change for the medical schemes environment.
- 8.3.12 MTCT prevention benefits should be made available to all beneficiaries, in line with the decision of the courts, in particular the decision of the Constitutional Court.

### 8.4 POST-EXPOSURE PROPHYLAXIS

- 8.4.1 Post-exposure prophylaxis (PEP) is the provision of ARV medication to those who may have been exposed to HIV in order to prevent infection. It is most often provided in the cases of:
- sexual assault:
- occupational injury (such as a needle-stick injury); and
- any other sexual exposure to HIV (such as any willing sexual activity).
- 8.4.2 The government recently announced in 2002 that rape victims are to be provided with ARV medication at all public health institutions. This treatment will be accompanied with counselling and testing for HIV, pregnancy and sexually transmitted diseases.
- 8.4.3 Table 7 below shows the response by medical schemes to providing benefits in this area.
- 8.4.4 Medical schemes have taken full responsibility for the provision of post-exposure prophylactics, 87% of options, covering 96% of beneficiaries, providing access to treatment in the case of sexual assault.
- 8.4.5 It was found that 91% of options, covering 94% of beneficiaries, had access to these treatments in cases of occupational injury.
- 8.4.6 The extension of PMBs in this area is essential and now forms part of the minimum package offered by government to all citizens following the Cabinet statement

of 17 April 2002. In this context, the authors recommended that medical schemes follow the Sunninghill Clinic protocol on sexual assault to achieve the best and most costeffective management.

	1	1 1 1 2	
	Sexual assault	Occupational injury	Other sexual exposure
Percentage of options	87%	81%	68%
Percentage of beneficiaries	96%	94%	79%

TABLE 7. Access to post-exposure prophylaxis

### 9. COVERAGE OF ARV THERAPY

- 9.1 ARV therapy is central to the management of HIV/AIDS. Since 1996, the use of combination therapy has reduced morbidity and mortality dramatically in Europe and North America (Palella *et al*, 1998) while the introduction of universal ARV access in Brazil has led to savings in hospitalisation costs (Ministry of Health, Brazil, 2001). These drugs are expensive and largely unaffordable in developing countries such as South Africa.
- 9.2 The absence of practical government action to reduce medicine prices has led organisations such as the Treatment Action Campaign and *Médecins Sans Frontières*, in defiance of patent laws into South Africa, to import ARV medication and treatment for opportunistic infections from other developing countries such as Brazil and Thailand, where generic medication is manufactured. In addition, the Doha Declaration of November 2001, which clarifies that patent laws should not be an obstacle to public health requirements, has been ignored by government.<sup>4</sup>
- 9.3 ARV medication can be divided into two main classes of drugs: protease inhibitors (PI) and reverse transcriptase inhibitors (RTI). Protease inhibitors are newer and more expensive, while reverse transcriptase inhibitors (such as AZT and 3TC) are widely available and are cheaper.
- 9.4 Over the last two years, the prices of ARVs in South Africa have been substantially reduced, leading to an increase in accessibility to those who previously could not afford them, even with private-sector medical scheme cover.
- 9.5 Treatment began in the form of a one-drug regimen, referred to as 'monotherapy'. Further research indicated that a combination of three drugs, loosely referred to as 'triple-therapy cocktails' or HAART (highly active ARV therapy), is optimal. In fact, mono-therapy and dual therapy have been shown to cause a build-up of resistance to ARV

<sup>4</sup> Nathan Geffen, National Manager Treatment Action Campaign, personal communication with the authors (22 March, 2002).

medication, resulting in triple therapy becoming less effective. The triple regimen is very powerful and can reduce the viral load to undetectable levels. Dual therapy results in sub-optimal therapy (Bredell Consensus Statement, 2001).

- 9.6 The utilisation of these drugs is limited by their cost and possible development of resistance. For the first 7 to 12 years, ARV therapy may not be necessary. Clinical monitoring is essential to ensure that treatment starts when the immune system cannot cope and a person with HIV/AIDS starts developing AIDS-related illnesses. At this stage, lifelong treatment with ARV medicines becomes essential. The majority of scheme members with HIV/AIDS will not need ARV therapy immediately or for a number of years.
- 9.7 In 2002, 73% of options provided access to ARV therapy. As may be seen from Table 8, this translates to access for 92% of beneficiaries.
- 9.8 It should be noted that access to benefits does not guarantee that the size of the benefit is sufficient to provide cover for the full year. This aspect of benefit design is dealt with in more detail in section 10.

	Percentage of options	Percentage of beneficiaries
No ARV therapy	27%	8%
Mono-therapy	20%	21%
Dual therapy	58%	73%
Triple therapy	71%	90%

TABLE 8. Beneficiaries with access to ARV therapy

- 9.9 The research has shown that there is a clear preference by medical schemes for triple therapy, 71% of options (translating into 90% of beneficiaries) following best-treatment protocols and providing access to the triple-therapy cocktail. Many options offer access to triple, dual or mono-therapy, depending on clinical preference.
- 9.10 However, a considerable proportion of options, 27%, currently offer no ARV treatment to their members. These options are from the smaller schemes and represent only 8% of beneficiaries.
- 9.11 For reasons of individual clinical benefit, public health and cost-effectiveness, it is essential that mono-therapy be immediately discontinued and dual therapy also be phased out as soon as possible. Mono-therapy leads to increased resistance, therapeutic failure and chronic side effects. Although dual therapy provides more sustainable benefits than mono-therapy, it also lacks the durable therapeutic value of triple therapy.
- 9.12 An ARV therapy guideline facilitated by the Council for Medical Schemes, based on the HIV Clinicians Society Guidelines, the Bredell Consensus Statement and the

World Health Organisation Guidelines for a Public Health Approach (WHO, 2002), is the minimum requirement for public health reasons and the best individual clinical outcomes. It is desirable from the perspective of public health and to save the lives of people with HIV/AIDS that triple ARV therapy forms a part of the PMBs. The WHO has also included all ARV drugs on its most recent essential drugs list.

### 9.13 SUPPORT SERVICES FOR ARV THERAPY

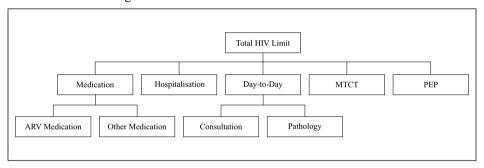
- 9.13.1 Medical scheme costs involved in providing ARV therapy, other than the drugs themselves, include diagnostics, drug monitoring, treatment of any potential side effects and counselling for people on drug treatment. Support for individuals or through support groups is a necessary component of ARV therapy.
- 9.13.2 Research at Somerset Hospital in Cape Town has shown adherence rates of more than 80% among all racial and socio-economic groups on ARV therapy. The MSF Khayelitsha pilot programme reports similarly high adherence rates, which are borne out by clinical results. A majority of patients who started ARV therapy in the MSF project had fewer than 48/ml CD4+ T-cells (the average for healthy persons is 800–1200/ml CD4+ cells) and an HIV viral load higher than 170 000 copies per cubic millilitre. After six months of therapy, more than 90% of the patients on ARVs had an undetectable viral load and had gained more than 135,5/ml CD4+ cells, thus beginning the reconstitution of their immune systems. (MSF/Department of Public Health and Primary Health Care UCT 2002)
- 9.13.3 It was found that 85% of beneficiaries that have access to any form of ARV therapy (including therapy to prevent MTCT and post-exposure prophylaxis), also have access to surveillance of drug effectiveness, a crucial stage in the management of drug treatment. 88% of these beneficiaries are also receiving counselling once on drug treatment.
- 9.13.4 The figures are slightly lower for restricted schemes than for open schemes. The authors find this surprising, since it would be expected that employers would be most concerned with the efficient use of ARV treatment for their employees.
- 9.13.5 It was found that 81% of beneficiaries who have access to ARV medication also have access to the surveillance of the effectiveness of these drug treatments and counselling. 15% of beneficiaries have no access to these benefits.
- 9.13.6 The inclusion of support services for those on ARV medication is essential to the cost-effective use of these drugs. Patient adherence to drug regimens is critical to beneficial clinical outcomes.

### 10. HIV/AIDS BENEFIT DESIGN IN MEDICAL SCHEME

10.1 While coverage for HIV/AIDS benefits is high, the question whether the benefits are adequate is a separate issue. This requires investigation of benefit structures at a micro-level. Stein, McLeod & Achmat (2002) provides a first indication of the type of benefit structure and the size of benefits in each benefit category. The detail is extensive and thus only a summary is provided in this paper. Health actuaries involved in designing and pricing medical scheme benefits are referred to the original monograph.

- 10.2 In the work of the Actuarial Society AIDS Committee on the impact on medical scheme costs, several researchers have called for more information on the benefit structures as well as typical amounts to include in projections. A suggested framework and an indication of costs are provided below.
- 10.3 The authors have identified six types of costs associated with HIV:
- medication costs, including ARV medication and other medication such as immune boosters;
- consultation costs;
- pathology costs;
- hospitalisation costs;
- MTCT costs; and
- post-exposure prophylaxis costs for events such as sexual assault, needlestick injury and other sexual exposure to HIV.
- 10.4 The typical relationship of these costs to various financial limits imposed by medical schemes is demonstrated in Figure 1.

FIGURE 1. Categorisation of costs and financial limits for HIV/AIDS benefits



10.5 A summary of the range of limits is given in Table 9. Discussion on the typical costs to be covered in each category, in mid 2002 prices, follows in section 10.6.

### 10.6 ARV AND OTHER MEDICATION LIMITS

- 10.6.1 The average monetary limit per beneficiary for ARV medication was R17 061 a year, which equates to R1422 a month. Three years ago, triple combination therapy averaged R4500 a month. Significant price reductions based, internationally, on generic comparisons and activist pressure, have reduced triple therapy to a range of R700 to R1800 a month. Brazilian generics used by *Médecins Sans Frontières* cost R450 a month.
- 10.6.2 These prices can be reduced further. Medical schemes face the following dilemma: to increase their average benefit to R2000 a month or to join the lobby for generic competition to ensure sustainable programmes in the long term.

		Limit (rands)	
Category of benefit	minimum	maximum	average (arithmetic)
ARV medication	1 300	40 000	17 061
Other medication	500	40 000	16 440
Consultation	440	35 000	2 921
Pathology	320	500 000	29 785
Hospitalisation (per family)	5 000	1 500 000	342 573
MTCT	500	40 000	15 549
Post-exposure-prophylaxis	500	40 000	15 467

TABLE 9. Range of limits per beneficiary for each category of benefit (rands)

- 10.6.3 ARV coverage is adequate in the main but could quickly be exhausted unless prices are reduced to generic levels. The cost to members of ARV benefits needs further investigation and standardisation to ensure sustainability and access.
- 10.6.4 Other medication is any form of medication designed to boost the body's immune system, prevent the onset of opportunistic infections and provide a healthier lifestyle for the member. These medications include nutrients and vitamins, as well as medication such as Co-trimoxazole (also known as Bactrim®, Purbac and Septran).

### 10.7 CONSULTATION LIMITS

- 10.7.1 It is likely that HIV-infected patients see general practitioners and specialists more often than other members. This is for two main reasons. Firstly, medical practitioners are needed for monitoring the disease, since the decrease in resistance of the immune system due to the HI virus will result in frequent opportunistic infections. Secondly, they are needed in the management of treatment and the surveillance of drug effectiveness.
- 10.7.2 This research suggests that a monetary consultation limit was the most popular method of capping this benefit. The authors were surprised to observe that 27% of options make full use of the member's savings account for the consultation benefit, particularly since only 4% of options made full use of savings for ARV medication. A visitation limit was also popular, 15% of options making use of this type of limit.

### 10.8 PATHOLOGY LIMITS

- 10.8.1 Pathology tests combined with the patient's overall health determine when the patient should start ARV therapy and they assist in the monitoring of the disease. Pathology tests for a person with HIV/AIDS are required to:
- diagnose opportunistic infections;
- ascertain the effectiveness of drug treatment;
- detect the reduction in viral load within the blood;

- assess the status of the immune system;
- monitor side-effects related to drugs; and
- monitor the development of possible resistance to the medication.
- 10.8.2 The main pathology tests are CD4 counts (which determine the level of deterioration of the patient's immune system), viral-load tests (which determine the amount of virus in the patient's blood) and HIV-antibody diagnostic tests. Combination blood counts and routine pathology tests are also necessary (Department of Health, 2000).
- 10.8.3 The average monetary limit for pathology was R29 785 a year. The real value of the average was actually less than this, since many options deduct expenditure for pathology benefits from their overall limit.
- 10.8.4 Current costs per patient for CD4 counts, viral-load tests and liver-function tests are approximately R2400 a year. These prices can be significantly lowered. For instance, a CD4 count currently costs R240 each time. Recently, researchers at the National Health Laboratory Services and the University of the Witwatersrand developed a new CD4 test that cost R82,50.
- 10.8.5 Similarly, researchers point to the cost of the PCR test for babies, which tests their HIV status accurately at six weeks, and costs R450. They believe that the price can be reduced to less than R80 a test if the patent holders (Roche) agree to generic licensing.
- 10.8.6 Consensus on monitoring costs at a meeting of experts hosted by *Médecins Sans Frontières* and Treatment Action Campaign suggested that monitoring costs could be reduced from R2 400 to R800 a year in the short term (MSF/TAC 2002). Here again, medical schemes can significantly contain costs by supporting collective efforts to reduce prices.

### 10.9 HOSPITALISATION LIMITS

- 10.9.1 The Registrar's Report for 2000 identifies hospitalisation costs as a major expenditure category for medical schemes, total hospital costs accounting for 33,7% of total risk benefits paid. Hospitalisation costs can be a large component of the total costs of treatment and management of HIV/AIDS and opportunistic infections.
- 10.9.2 It is significant that 38% of options have an unlimited hospitalisation benefit, which includes hospitalisation for HIV/AIDS. 49% of options gave their HIV-hospitalisation limits out of a more general hospital category and 18% stem from the schemes' overall limit. Only 20% of the hospitalisation limits were specifically for HIV/AIDS.
- 10.9.3 Very few medical schemes hold separate limits for MTCT. Rather, many schemes have separate HIV limits that include MTCT benefits and post-exposure prophylaxis benefits.

### 10.10 FORMS OF FINANCIAL LIMITS

10.10.1 The regular monetary limit was the most common mechanism used for all HIV-associated claims. Members' medical savings accounts were utilised to varying degrees, the highest usage appearing in the HIV consultation limit. Capitation, networks

and ex-gratia benefits were minimally used. Event-based limits were predominantly used for hospitalisation, MTCT and post-exposure prophylaxis benefits. Hospitalisation benefits accounted for the largest percentage of unlimited benefits.

- 10.10.2 The benefit structures were also analysed according to the most common cost-management mechanisms utilised. Co-payments were seen to be used preferentially to levies, some schemes using a co-payment as much as 50% of cost price. However, no more than 14% of schemes used either a co-payment or a levy for any limit.
- 10.10.3 The most common tariffs used were the Board of Healthcare Funders (BHF) tariff for pathology, hospitalisation and consultation benefits, and cost price for ARV medication, other medication, MTCT treatment and post-exposure prophylaxis.

### 11. RECOMMENDATIONS ON BENEFIT DESIGN AND MANAGEMENT

### 11.1 USE OF DISEASE MANAGEMENT PROGRAMMES

- 11.1.1 Only 13% of those schemes offering more comprehensive benefits than PMBs have no specialised management system in place. These schemes should consider the benefits of a co-ordinated approach to management of the disease that can be delivered by a disease management programme. In particular, in this fast-changing clinical area, access to research and protocols for the disease are important.
- 11.1.2 The results from the survey indicate that the majority of medical schemes surveyed are already offering an extensive range of HIV/AIDS benefits to their members. Trustees have thus been successful in providing comprehensive access to benefits for HIV/AIDS.
- 11.1.3 The disturbing evidence of the low participation rates in the various disease management programmes, despite South Africa's high HIV prevalence rates, points to the inadequate marketing of these programmes and the lack of members' awareness of these services. A number of other factors were also suggested by Stein, McLeod & Achmat (2002).
- 11.1.4 In order to expand programme participation, further initiatives need to be implemented so as to make members more cognisant of the confidentiality of the programmes and the services they offer to help manage the disease, and to give members accurate scientific information on the benefits and risks of ARV therapy.

### 11.2 BENEFITS FOR ARV THERAPY

- 11.2.1 There is a clear indication that the private healthcare sector allows access to triple-combination therapy as the optimal ARV treatment. It is promising to see that medical schemes are considering clinical best practice when providing members with access to treatment.
- 11.2.2 Nevertheless, ARV medication still constitutes a small part of the schemes' overall limit, and schemes should look for capacity to increase this limited service to their members. 71% of options (representing 90% of beneficiaries) already provide triple-combination ARV therapy. However, 20% of options are still providing mono-therapy or dual therapy as treatment.
  - 11.2.3 In line with all the national and international guidelines, the authors call

on the Council for Medical Schemes to facilitate schemes to adopt a guideline on ARV therapy that stipulates triple therapy as the minimum standard.

11.2.4 Use of members' medical savings accounts in HIV-related instances is not as high as expected, only 4% of options making use of members' savings accounts to fund ARV medication.

### 11.3 RESPONSIBILITY AND WILLINGNESS TO TACKLE THE EPIDEMIC

- 11.3.1 It is reassuring to see that most medical schemes are accepting responsibility for their members' health and not passing the risk on to the member by forcing coverage through his or her own savings account.
- 11.3.2 It is still noticeable that the challenge to deal with the virus is not as high on many schemes' agendas as it should be. Many schemes refused to answer the questionnaire on the grounds that they have no members with HIV, that they do not anticipate HIV to be a future problem among their members and that they currently have no HIV benefit system in place.
- 11.3.3 However, the authors found it encouraging to witness the current reform of certain schemes' HIV structures. Overall, this indicates an increased commitment based on the experience of members requiring treatment and support, as well as an understanding of the impact of the epidemic on society.

### 11.4 CONFUSION FOR MEMBERS IN BENEFIT DESIGNS

- 11.4.1 Lack of consistency between all the open and restricted schemes' HIV-associated limits was also noticeable. Limits were given in a range of different ways including a per-beneficiary limit, a per-family limit, a per-beneficiary and a per-family limit or a limit according to the number of member dependants. Other limits were given per event, some per month as opposed to per year and some according to the member's medication needs.
- 11.4.2 It is thus difficult for members to compare scheme benefits when joining a scheme. Efforts should be made to ensure some standardisation across all medical schemes.

### 11.5 ADEQUACY OF BENEFITS

- 11.5.1 Benefits for prevention, treatment of opportunistic infections and medication are in the main adequate. Prevention coverage through counselling, testing, post-exposure prophylaxis for occupational injury, sexual assault and MTCT is mostly adequate throughout the schemes surveyed.
- 11.5.2 Smaller schemes may need encouragement to ensure compliance, especially since these benefits will constitute part of the PMBs.
- 11.5.3 ARV coverage is also adequate in the main, but could quickly be exhausted unless prices are reduced to generic levels. The cost to members of ARV benefits needs further investigation and standardisation to ensure sustainability and access. Schemes are encouraged to join together with civil society lobby groups to work for the reduction of treatment costs.

### 11.6 SUSTAINABILITY OF BENEFITS

- 11.6.1 The main cost drivers in the treatment of HIV/AIDS include drug costs, diagnostics and monitoring, hospitalisation and support services. The sustainability of medical schemes and the benefits depends on the management of HIV/AIDS in a non-discriminatory and cost-effective manner. The use of disease management programmes is an essential step. However, price reductions and active involvement of all medical scheme members in cost-containment are two components essential to the ensuring of sustainability of benefits, and ultimately of schemes.
- 11.6.2 In order to reduce the prices of medicines for opportunistic infections and of ARVs, generic substitution is essential. ARV therapy can be reduced to R450 a month, or lower, through the use of generics. This will require the engagement of medical schemes and the Council for Medical Schemes with government and drug companies to ensure that non-exclusionary voluntary licences are granted to all generic manufacturers on the basis of a 4-5% royalty.
- 11.6.3 Similarly, the laboratory costs of diagnostics and monitoring can be reduced significantly through generic substitution or price reductions. These measures are essential because of the scale of the HIV/AIDS epidemic and the high costs of treatment.
- 11.6.4 Medical schemes should actively seek broader coalitions amongst one another and with civil organisations like Treatment Action Campaign and other NGOs to lobby collectively for a reduction in treatment and monitoring costs.

### 12. RECOMMENDATIONS ON PRESCRIBED MINIMUM BENEFITS

- 12.1 The provision by medical schemes of a package limited to only the PMBs was not as extensive as the authors had expected, or as industry commentators had feared. The authors found it encouraging to see that only 4% of beneficiaries have access only to the current PMB Package.
- 12.2 However, it is of concern to the authors that 9% of options make use of the illegal practice of the funding of PMBs from savings accounts. They have recommended that the Council for Medical Schemes immediately issue a circular warning all schemes that this practice is unacceptable and unlawful. They strongly supported the amendment in the 2002 regulations that specifically makes the use of savings accounts to fund PMB conditions unlawful.
- 12.3 This research indicated that many schemes' management and principal officers are ill informed to understand the best management and treatment of the disease. It became clear from vague questionnaire responses that some principal officers did not even understand the concept of PMBs. In addition, the fact that medical schemes are voluntarily verifying that they are not providing treatment of conditions where coverage is compulsory, indicates that they are not evading the law, but rather do not understand it. Thus, more interaction between the schemes' disease management programmes and scheme trustees needs to be established.

- 12.4 So extensive was the provision of certain treatments such as post-exposure prophylaxis in the case of sexual assault and occupation injury, as well as ARV therapy to prevent MTCT, that these benefits had already been provided by industry in advance of the proposed extension of PMBs by the Minister of Health in mid-2002.
- 12.5 The large number of beneficiaries already covered for the proposed PMBs suggested that, at an industry level, the PMBs could be legislated with little additional burden on schemes as a whole.
- 12.6 During 2002, almost all the beneficiaries in the survey were already covered for the PMBs, but a large number of smaller open schemes had not reported and probably did not provide any HIV benefits. These small schemes could discriminate against HIV-positive beneficiaries and were effectively practising a form of risk-rating through their benefit design. They were placed at an unfair advantage in price terms by choosing not to offer certain benefits that were already provided to the majority of beneficiaries.
- 12.7 Accordingly, the authors have recommended in the strongest possible terms that the Minister of Health extend the proposed PMBs for HIV/AIDS, as set out in the proposed 2002 regulations.

### 12.8 FURTHER EXTENSION OF PRESCRIBED MINIMUM BENEFITS

- 12.8.1 The Minister of Health asked for assistance in the formulation of the inclusion in PMBs of a position on ARV medication.
- 12.8.2 The survey shows that 92% of beneficiaries had access to ARV therapy and 90% of beneficiaries already had access to triple-combination ARV therapy. However, the size of the benefit is shown to be inadequate for a full year's supply of medication in many cases.
- 12.8.3 It was not possible in the limited time for preparation of comments on the draft regulations to complete all the modelling work that would be needed to show the long-term impact on individual medical schemes of including ARV medication in the PMBs.
- 12.8.4 The authors are increasingly of the opinion that the financial impact at an industry level is manageable, but it remains to be demonstrated how individual schemes would be affected. The existence of a risk-equalisation mechanism between schemes would have led the authors to make an immediate recommendation to include ARV treatment in the PMBs. Its absence led the actuaries to take a more cautious stance.
- 12.8.5 The authors have recommended that further modelling needs to be urgently carried out to predict the impact of the epidemic over time on individual schemes. They argued that the Minister of Health should promulgate the extension of PMBs to include ARV treatment, but allow exemptions to schemes that have demonstrable problems in the absence of a risk equalisation mechanism. The Minister of Health was urged to pursue the introduction of a risk equalisation mechanism between schemes at the earliest possible opportunity.

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# APPENDIX A EXTRACTS FROM THE MEDICAL SCHEMES ACT AND 1999 REGULATIONS ON MINIMUM BENEFITS

### ANNEXURE A TO THE REGULATIONS

### EXPLANATORY NOTE

The Department of Health recognises that there is constant change in medical practice and available medical technology. It is also aware that this form of regulation is new in South Africa. Consequently, the Department shall monitor the impact, effectiveness and appropriateness of the PMBs provisions.

A review shall be conducted at least every two years by the Department that will involve the Council for Medical Schemes, stakeholders, Provincial health departments and consumer representatives. In addition, the review will focus specifically on development of protocols for the medical management of HIV/AIDS.

These reviews shall provide recommendations for the revision of the Regulations and Annexure A on the basis of:

- (i) inconsistencies or flaws in the current regulations;
- (ii) the cost-effectiveness of health technologies or interventions;
- (iii) consistency with developments in health policy; and
- (iv) the impact on medical scheme viability and its affordability to Members.

### ANNEXURE A: LIST OF PRESCRIBED MINIMUM BENEFITS

Categories (Diagnosis and Treatment Pairs) constituting the Prescribed Minimum Benefits Package under Section 29(1)(o) of the Medical Schemes Act (listed by Organ-System chapter)

### Haematological, Infectious and Miscellaneous Systemic Conditions

Code: 168s

Diagnosis: # HIV-associated disease – first admission or subsequent admissions

Treatment: # medical and surgical management for opportunistic infections / localised

malignancies

### EXPLANATORY NOTES AND DEFINITIONS TO ANNEXURE A

6) In certain cases, specified categories shall take precedence over others present. Such 'overriding' categories are preceded by the sign '#' in their descriptions within Annexure A.

For example, where someone is suffering from pneumonia and HIV, because the HIV category (168S) is an overriding category, the entitlements guaranteed by the 'pneumonia' category (903D) are overridden.

### APPENDIX B EXTRACTS FROM REVISED REGULATIONS ON PRESCRIBED MINIMUM BENEFITS, NOVEMBER 2002

'prescribed minimum benefits' mean the benefits contemplated in section 29(1)(o) of the Act, and consist of the provision of the diagnosis, treatment and care costs of –

- (a) the Diagnosis and Treatment Pairs listed in Annexure A, subject to any limitations specified in Annexure A; and
- (b) any emergency medical condition;

'emergency medical condition' means the sudden and, at the time, unexpected onset of a health condition that requires immediate medical or surgical treatment, where failure to provide medical or surgical treatment would result in serious impairment to bodily functions or serious dysfunction of a bodily organ or part, or would place the person's life in serious jeopardy.

### AMENDMENT TO ANNEXURE A OF THE REGULATIONS

Annexure A of the Regulations is hereby amended –

In the part entitled 'Haematological, Infectious and Miscellaneous Systemic Conditions' –

i. by the substitution for Code 168S of the following

'Code: 168S

Diagnosis: # HIV-Infection

Treatment: HIV voluntary counselling and testing

Co-trimoxazole as preventative treatment Screening and preventive treatment for TB

Diagnosis and treatment of sexually transmitted infections

Pain management in palliative care Treatment of opportunistic infections

Prevention of mother-to-child transmission of HIV Post-exposure prophylaxis following sexual assault';

### ADDITIONS TO EXPLANATORY NOTES AND DEFINITIONS

(2A) In respect of treatments denoted as 'medical management' or 'surgical management', note (2) above describes the *standard* of treatment required, namely 'prevailing hospital-based medical or surgical diagnostic and treatment practice for the specified condition'. Note (2) does not restrict the setting in which the relevant care should be provided, and should not be construed as preventing the delivery of any PMB on an outpatient basis or in a setting other than a hospital, where this is clinically most appropriate.

### REGULATION 10: PERSONAL MEDICAL SAVINGS ACCOUNTS

(6) The funds in a member's medical savings account shall not be used to pay for the costs of a prescribed minimum benefit.

**APPENDIX C** QUESTIONNAIRE

# HIV/AIDS Benefits Questionnaire 2002

Thank you for taking the time to complete this questionnatie. TAC and CARE would appreciate if if you would complete the following 12 questions regarding the scheme's HIVAIDS benefit situatures for 2002. Please send the scheme's benefit situatures for 2002 along with this questionnatie. After you was completed the questionnatie, please send if to the researcher by 15 March 2002. If you wish to fill it in electronically, e-mail the researcher to send you are accompleted the questionnatie.	and CARE would appreciate It If you would a eme's benefit structures for 2002 along with researcher by 15 March 2002. If you wish to	complete the following 12 questions regarding the this questionnaire.  This questionnaire.  Ill it in electronically, e-mail the researcher to send you
If you are unable to answer any specific question, please state why. If you have any queries, contact the researcher, Andrew Stein, whose details are given at the end.	rhy. If you have any queries, contact the re	searcher, Andrew Stein, whose details are given at the
Name of medical scheme:	Scheme code:	
Name of administrator:	Open / Restricted / Exempt scheme:	pt scheme:
Details of person submitting questionnaire:		
Name :	Position within scheme: _	
Telephone number: ()	Fax number: ()	
e-mail address:	I	
1. Below, fill in the details for all the options the scheme offers for 2002.	for 2002.	
Option Name	Number of families as at 1 January 2002	Number of beneficiaries as at 1 January 2002
Option Number 1:		
Option Number 2:		
Option Number 3:		
Option Number 4:		
Option Number 5:		
Option Number 6:		
Option Number 7:		
Option Number 8:		

	Option Number 9:												
	Option Number 10:												
	Option Number 11:												
	Option Number 12:												
O	If the scheme is linked to a disease management programme, please place a cross in this box.												
	If not, please skip to question 3.												
Ω	Who manages the program? own scheme program Aid for AIDS Calibre Clinical Consultants Care Assist Lifesense MX Health Newmed Qualsa												
O	Option Number Insert a cross under those options where the member specifically needs to register to quality for this program.	-	7	ю	4	ro.	9	7	ω	٥	01	=	12
σ	Fill in the number of beneficiaries registered for HIV/AIDS			7		8		4		ις		9	
				ω		6		10				12	

For questions 3–9, please cross all the boxes applicable to each option.

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Which of the following support services are provided?	HIV counselling	HIV testing	Education & information	Surveillance of drug effectiveness	Counselling tor people on drug freatment	Which of the following does the scheme provide?	Screening for Tuberculosis (TB)	Preventative therapy for Tuberculosis (TB)	Preventative therapy for PCP Pneumonia	Ireatment for Sexually Iransmitted Diseases (SIDs)	Does the scheme provide treatment for opportunistic infections out of	Normal Hospital Cover	Chronic Medication Cover	HIV Benefit Cover	Other specify	Which of the following does the scheme provide to prevent Mother-16-Child Transmission (MTCT)?	. AZT only	AZT and 3TC or other combination therapy	Nevirapine	Caesarian section	Formula feeding	MTC1 Counselling	Does the scheme provide anti-retroviral medication as post-exposure prophylaxis for:	Sexual assault	Occupational therapy	Other sexual exposure to HIV
<sub>6</sub>						4					5.					9							7.			

œ.	8. Which of the following anti-retroviral 'cocktails' does the scheme provide for the treatment of HIV?	-	7	ო	4	2	9	7	80		9 10 11	Ξ	12	
	No anti-retrovirals are provided													
	Mono-Therapy													
	Dual-Therapy													
	Triple-Therapy													
٥.	<ol> <li>Please place a cross under those options which offer Prescribed Minimum Benefits only?</li> </ol>	-	2	3	4	S	9	7	89	6	11 01	11	12	

Please specify for each sub-limit, whether the limit is specifically for HIV/AIDS or whether the limit falls under a more general limit which also applies to non-HIV members. 9

If the limit is 'specifically for HIV/AIDS', then please place a cross in that box and provide the Rand amount per family and per beneficiary for this limit for each If the limit falls under 'another category', then please state the name of the category this limit falls under and provide the overall Rand limit for this category per family and per beneficiary for each option.

Please specify what tariff benefits are paid at by selecting a tariff from the list given below.

Scheme or administer-negotiated tariff

Board of Healthcare Funders (BHF) Hospital Association of South Africa (HASA)

Maximum Medical Aid Price (MMAP)

South African Medical Association (SAMA) Other: please specify Then indicate the percentage copayment and levy paid by the member for each option.

ostly, specify how each sub-limit is funded from a medical savings account or similar arrangement for each option from the list given below.

No savings account therefore not applicable

Not at all Partially with benefit limited to funds in savings account

Fully

10a Anti-retroviral medication

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Limit is specifically for HIV/AIDS		Per family	Per beneficiary	Tariff used	% copayment	Levy (R)	Use of savings	Other medication (including nutrients and vitamins)	Limit is specifically for HIV/AIDS		Per family	Per beneficiary	Tariff used	% copayment	Levy (R)	Use of savings	Consultation		Limit is specifically for HIV/AIDS		Per family	Per beneficiary	Tariff used	% copayment	Levy (R)	Use of savings
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	8							l vitamins)		m										3						
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for HIV/AIDS	-	~	~			2			for HIV/AIDS		-	2	~			R	
Limit is specifically for HIV/AIDS		Per family	Per beneficiary	Tariff used	% copayment	Levy (R)	Use of savings	De Hospitalization	Limit is specifically for HIV/AIDS			Per family	Per beneficiary	Tariff used	% copayment	Levy (R)	Use of savings

When faxing or e-mailing this questionnaire, please attach the scheme's 2002 benefit structures or post them to the underlying address:

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