

# African Collaborative for Health Financing Solutions

Implementation guide: Pilot project to  
distribute centrally procured ARV medicines to  
PSEMAS patients through the private sector

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## List of acronyms

<b>ARV</b>	Antiretroviral
<b>CMS</b>	Central Medical Stores
<b>DHIS2</b>	District Health Information Software 2
<b>GRN</b>	Government of the Republic of Namibia
<b>KII</b>	Key informant interview
<b>M&amp;E</b>	Monitoring and evaluation
<b>MoF</b>	Ministry of Finance
<b>MoHSS</b>	Ministry of Health and Social Services
<b>MOU</b>	Memorandum of understanding
<b>NAMAF</b>	Namibian Association of Medical Aid Funds
<b>NEMList</b>	Namibia Essentials Medicines List
<b>NMRC</b>	Namibia Medicines Regulatory Council
<b>PSEMAS</b>	Public Sector Employee Medical Aid Scheme
<b>UHC</b>	Universal health coverage

# 1. Introduction

## 1.1 Background of pilot study

The Ministry of Finance (MoF) subsidizes approximately 85% of the claims paid by the Public Sector Employee Medical Aid Scheme (PSEMAS), which provides access to private healthcare services for public servants and their dependants. The costs for medicines and supplies in the private sector are typically much higher than those that the Ministry of Health and Social Services (MoHSS)<sup>1</sup> can secure through procurement by its Central Medical Stores (CMS). With approximately one-third of PSEMAS spending going towards pharmaceuticals, the higher prices paid in the private sector for medicines and supplies contribute to PSEMAS spending more than twice as much per beneficiary (NAD 7,489) than the MoHSS spends per person who does not have medical aid coverage (NAD 3,545).

By purchasing higher volumes of medicines and supplies, the MoHSS often secures better unit prices than those in Namibia's private health sector. Additionally, the MoF recently granted the MoHSS a temporary exemption from the Public Procurement Act's requirement to give preference to domestic bidders for the procurement of medicines and supplies, facilitating greater access to international suppliers. Due to this exemption, the impact anticipated on medicine and supply prices is positive. The MoHSS can procure directly from international suppliers and manufacturers themselves, which provides access to more reasonable prices for improved sustainability on account of a shortened supply chain and avoiding the additional local supplier costs.

This pilot model allows the MoHSS, through its CMS, to procure selected medicines and supplies for distribution to PSEMAS beneficiaries via the private sector providers that care for them. That could allow the government to generate considerable savings by avoiding some of the private sector's high unit prices while at the same time sustaining access to high-quality health commodities for PSEMAS beneficiaries. The MoHSS and CMS have enforced stringent measures to ensure the quality of the health commodities, particularly for ARVs, and the benefits of these measures could also extend to the private sector for improved quality of care.

## 1.2 Purpose and objectives

The purpose of the pilot exercise is to realize cost savings for PSEMAS to create additional fiscal space for health, which is desperately required for the country to make progress towards Universal Health Coverage (UHC) and secure the sustainability of the health response. Specifically, the pilot sets out to achieve the following objectives:

- Generate savings opportunities by the MoF and PSEMAS from lower medicine and supply costs, which is reallocated to the MoHSS to maintain the government's spending allocation for health in support of the Abuja target<sup>2</sup>.
- Increase purchasing power for the MoHSS by procuring in greater volumes.
- Ensure consistency in the treatment of HIV/AIDS and the types of ARVs available in Namibia.
- Generate lessons from this HIV-focused pilot for application to additional health areas (e.g., medicines and supplies required for chronic care).
- Strengthen collaboration between the MoHSS and MoF on efforts to promote sustainability for health and achieving greater efficiencies within the health sector.

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<sup>1</sup> Overall, the average price for ARVs paid by PSEMAS was found to be close to twice the price that CMS paid for ARVs through their central procurement mechanisms.

<sup>2</sup> In April 2001, the African Union countries met and pledged to set a target of allocating at least 15% of their annual budget to improve the health sector and urged donor countries to scale up support.

### 1.3 Assessment methodology

The development of this pilot started by identifying key stakeholders in the purchasing, distribution, and regulation of pharmaceutical and health products. Sixteen key informant interviews were conducted from the public and private sectors to map how the pharmaceutical supply chain works, focusing on purchasing and antiretroviral (ARV) medicine distribution in each sector. The interviews strived to understand how current systems could be leveraged to distribute centrally procured ARVs through private providers to PSEMAS patients, gain insights into strengths and weaknesses within current operations, and identify potential challenges distributing centrally procured ARVs through private providers to PSEMAS patients.

In addition to the interviews, a parallel study reviewed how other countries in Africa carry out similar distribution systems intended for cost-saving. The developed case studies focused on similar systems used in South Africa, Kenya, and Zambia.

Furthermore, PSEMAS and CMS data on the quantities and prices of ARVs procured were collected and analysed. The analysis generated estimates of potential cost savings realised through a model whereby centrally procured ARVs are distributed to PSEMAS patients through private sector providers.

Based on the findings of the key informant interviews and case studies, two pilot models were developed. Due to COVID-19 restrictions, key informant interviews were again used to review the proposed pilot distribution model options, estimated cost savings, and to obtain their input on the feasibility of the proposed implementation arrangements. The model option deemed the most feasible was selected and further refined to accommodate practical requirements highlighted by the key informants. Included in this report are the decided model's implementation arrangements.

## 2. Pilot model for distribution of centrally procured ARVs

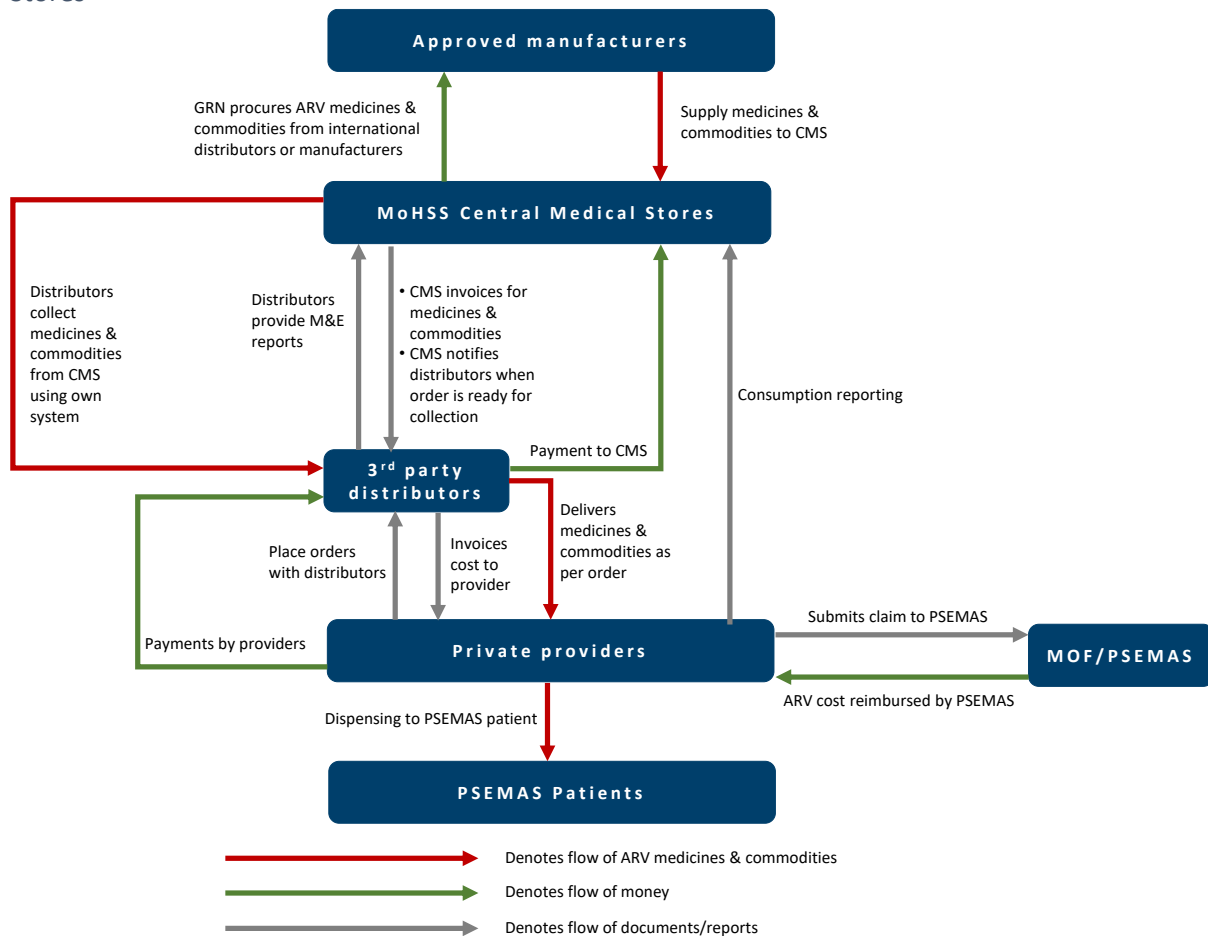
### 2.1 Overview of distribution system design

The pilot model for the distribution of centrally procured ARVs through private sector providers was designed based on extensive stakeholder consultations, a comprehensive mapping of the existing pharmaceutical distribution systems, and the review of case studies on similar approaches adopted in South Africa, Kenya, and Zambia. The model leverages the comprehensive and highly efficient systems that are already in place in the private sector, thereby limiting the additional burden placed on the overstretched public sector, including CMS<sup>3</sup>. As such, the model utilizes existing private pharmaceutical distributors that play a vital role in ensuring an adequate supply of medicines and supplies to private sector providers. The selected distributors will need experience forecasting stock requirements and management, adequate temperature-controlled storage facilities, and an extensive distribution network that delivers medicine and supplies to the private sector providers across the entire country within a minimal timeframe (typically within 24 to 48 hours). The flow of the transactions involved in this model is illustrated in Figure 1.

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<sup>3</sup> To ensure the administrative burden for CMS is kept to a minimum during the pilot, it will need to be determined whether all existing private pharmaceutical distributors are given access to the centrally procured ARVs for purposes of inclusiveness or if only a few of the biggest pharmaceutical distributors will be given access to procure the ARVs directly from CMS.

Figure 1: Proposed model for the distribution of ARVs to the private sector from the Central Medical Stores



\*GRN: Government of the Republic of Namibia; M&E: Monitoring and Evaluation.

Under this model, CMS is responsible for procuring ARVs from either international or local manufacturers/distributors for PSEMAS patients and all other private sector patients. The procurement of ARVs will be added to the CMS's routine supply planning processes to ensure the national demand for ARVs is adequately covered and the appropriate buffer stock levels are maintained. Demand from private providers and distributors will be included within CMS's forecasting to ensure stock at CMS can fully cover the public and the private sector ARV needs.

The selected private pharmaceutical distributors will sign a memorandum of understanding (MOU) with CMS to allow access to ARVs at a lower cost. Private distributors will then regularly order ARVs from CMS and will be responsible for collecting the order within five days of being notified of its completion. Payments made by private pharmaceutical distributors will be paid into a revolving fund maintained by MoF and are required to provide proof of payment before collecting the ARV stock. CMS sets prices for each ARV quarterly (refer to section 2.3.6 for additional details on price setting and communication), to which with an additional 2% procurement fee and 3% warehousing fee will be added. These fees aim to cover the additional costs incurred by CMS regarding administrative costs, hiring of additional human resources to process the private sector procurement and distribution to the private pharmaceutical distributors, costs of necessary infrastructure, and maintaining the reporting systems.

The transactions between private pharmaceutical distributors and private providers continue to occur using the existing method. When private providers place their orders for ARVs, private pharmaceutical



distributors then deliver the ARVs using existing distribution channels and charge a pre-defined price for the ARVs comprising the amount charged by CMS plus an additional 12.5% distribution fee to cover the costs of the distributors.

The private providers will dispense the centrally procured ARVs to all its patients considering it is not feasible for them to introduce parallel inventory management systems to keep centrally procured ARVs for PSEMAS patients separate from those procured for other patients. This implies that all patients accessing ARVs from private providers will benefit from the lower prices by procuring the ARVs through CMS. The private providers will continue to charge PSEMAS and the private medical aid funds for the ARVs dispensed, and PSEMAS will then reimburse the private providers in alignment with the schemes' benefit guidelines and options. To ensure the amount claimed from the funds align with the pre-defined price set for private providers, tariffs will be imposed by the administrators of PSEMAS, Methealth Namibia, and the private medical aid funds through the Namibian Association of Medical Aid Funds (NAMAF) (refer to section 2.3.6 for additional details on price-setting). The price at this level will comprise the price paid to the private pharmaceutical distributors plus a 50% mark-up that is the current industry standard for all pharmaceutical products. To monitor this method for the pilot exercise, private providers will submit monthly reports to CMS on the quantities of ARVs dispensed to PSEMAS and other private patients.

Pharmaceutical Society of Namibia (PSN) will represent the private providers in the pilot. PSN is a professional body for pharmacists and pharmacies, representing the pharmacy profession in the development and maintenance of healthcare policy. As such, the buy-in, support, cooperation, and involvement of PSN throughout the pilot will be critical.

## 2.2 Estimated cost savings

A fundamental step in designing and determining the feasibility of the pilot model was to estimate the potential cost savings. The purpose of the pilot exercise is to allow PSEMAS to realize cost savings, which could, in turn, be reallocated to the MoHSS to provide more equitable access to quality healthcare to the 80% of the population that is reliant on public health services.

While the initial intention was to generate cost savings for PSEMAS only, the practical implications of limiting access to PSEMAS patients would cause a significant burden on private providers stock management and dispensing control measures. Therefore, it was decided to allow the entire private sector access to the centrally procured ARVs in the pilot, which could mean substantial cost savings by the private medical aid funds. Due to the limited availability of data, cost savings for the private sector could not be fully estimated. Nonetheless, the cost savings for PSEMAS were estimated using the comprehensive data sets obtained from both PSEMAS and CMS.

The assessment of potential cost savings for distributing centrally procured ARVs to PSEMAS beneficiaries through private sector providers was found to be substantial, even after taking into account the additional distribution and logistics costs involved in the implementation of this model.

Estimated cost savings based on data collected from PSEMAS (through their administrators) and CMS include the quantities of ARVs procured and the average price paid over three years (2017 to 2019). The difference in prices paid by PSEMAS and those paid by CMS were compared by linking the ARV products based on active ingredients instead of a brand name. The calculation of the price differences also took into account the additional costs of procurement, warehousing, distribution, and logistics that would be incurred by adopting this model. The table below shows potential cost savings, and the detailed calculations are included in Annex 2.

Table 1: Potential cost savings for PSEMAS

Year of estimation	Ratio PSEMAS price/CMS price incl. above fees	Potential Annual Cost saving (NAD)	Potential Annual Cost Saving per Beneficiary on ART
2017	1.77	NAD 39,865,906.97	NAD 1,546.86
2018	1.59	NAD 38,761,439.26	NAD 1,504.01
2019	1.49	NAD 40,676,370.37	NAD 1,578.32

### 2.3 Implementation arrangements

The MoHSS will be responsible for policy formulation, capacity building, and stewardship in the pilot period, while the private medical facilities will be mandated by the provision of services for the PSEMAS beneficiaries. CMS will play a key role in securing the availability of ARVs for the entire country. To ensure the pilot exercise's success, these institutions will perform their functions according to their mandate.

### 2.3.1 Roles and responsibilities

The table below provide a summary of the specific roles and responsibilities of each entity involved in the implementation of this pilot exercise.

Table 2: Responsibilities of key stakeholders in pilot implementation

<b>Responsibility</b>	<b>CMS</b>	<b>Private distributors</b>	<b>PSEMAS</b>	<b>PSN</b>
Provide technical support in the development and launching of the pilot distribution model for ARVs to the private providers.	X	X	X	X
Ensure reliable and timely supply of ARVs to the private providers via the private distributors.	X	X		
Provide warehousing of ARVs and maintain adequate buffer stock levels to prevent stock-outs of ARV.	X	X		
In collaboration with the private distributors, estimate and forecast the required quantities of ARVs and schedule the procurement in accordance with the estimated demand.	X	X		
Order ARVs from CMS on the same schedule as public facilities (i.e. every 6 weeks), using the required forms and processes.		X		
Issue invoice for the ARVs to the private distributor and notify private provider that products are ready for dispatch.	X			
Process payments for ARVs in accordance with invoice issued by CMS		X		
Collect ARVs from CMS warehouses within 5 days of receiving notification that products are ready for dispatch.				
Dispatch ARVs as per the orders received from private distributors within seven working days of receipt of the order, after confirming the payment was made.	X			
Distribute ARVs to private providers through usual distribution channels		X		
Charge prices to private providers in accordance with the agreed-upon prices chargeable by private distributors.				
Provide leadership and policy direction during the meetings of the Interagency Steering Committee in charge of the pilot program coordination.	X			
Promote public-private partnership between CMS and private pharmaceutical distributors for the realization of desired results through active involvement.	X	X	X	X

<b>Responsibility</b>	<b>CMS</b>	<b>Private distributors</b>	<b>PSEMAS</b>	<b>PSN</b>
Promote awareness of the pilot model, the potential cost savings and implications on depleting the annual limits to PSEMAS beneficiaries in consultation with the MoHSS and the Public Service Commission of Namibia			X	X
Communicate the pilot study content, design and results to private provider members				X
Monitor and evaluate initiatives to ensure concrete results are achieved in pilot with partners with active feedback mechanisms in place.	X	X	X	X
Document lessons learnt and best practices during the pilot for continual improvement	X	X	X	X
Review pricing of ARVs on a quarterly basis to ensure alignment with purchase price paid and communicate prices of ARVs by issuing updated pricelists to private distributors and private providers on a quarterly basis.	X		X	X
Notify private providers, PSEMAS and administrators or private medical aid funds of any actual or anticipated stock-outs of certain ARVs.	X	X		

### *2.3.2 Contractual agreements*

MoUs will be signed, so expectations, rights, and obligations of parties involved in the pilot model's implementation will be clearly defined and all parties are cognisant of the arrangements. One type of MoU will be signed between CMS and the private pharmaceutical distributors, while the distribution of the ARVs from the private pharmaceutical distributors to the private providers will leverage off the existing agreements between these parties. Additional MoUs will be signed between the MoHSS, PSEMAS, and private medical funds to define the standard prices charged, outline reporting requirements, and establish information flow from the funds to MoHSS supporting appropriate accountability and transparency. Annex 1 includes sample MoUs defining the contractual arrangements between these parties.

### *2.3.3 Selection of ARV products*

The comparison of ARVs claimed through PSEMAS and those procured by CMS showed differences in the ranges of products procured by the private sector and the public sector. These differences in products and regimen could have implications on the feasibility of implementing this pilot exercise, as there are risks relating to adherence as well as concerns about the willingness of patients and physicians to change the ARV regimen. It will be important for the private sector and CMS to work collectively to ensure that the ARV products available for distribution through the private sector are of high quality and in line with the treatment guidelines.

However, for the pilot model to be successful, patients will not be required to change their ARV regimen<sup>4</sup>. ARVs that CMS does not have on their list, and thus do not have in stock, should continue to be procured directly by the private pharmaceutical distributors at their prices to ensure consistency in the availability in ARV regimen and to prevent patients having to transition to another regimen. Transitioning to a regimen available through CMS is the only instance they would benefit from the lower prices.

### *2.3.4 Forecasting and ordering*

CMS will rely on the expertise, experience, and data of the private pharmaceutical distributors to ensure appropriate forecasting of ARV stock requirements and effective management ordering and scheduling ARV procurements for the private sector. As such, a task force will be established comprising representatives of CMS and the private pharmaceutical distributors in Namibia. The Director of CMS will lead the task force and report to the inter-ministerial steering committee which will be established for purposes of this pilot model (refer to section 3.1 below). This task force will be responsible for consolidating ARV requirements of the entire private sector for each of the selected ARV products, and ensuring that these requirements are included in the forecasts and orders managed by CMS. Furthermore, this forecasting task force will also collaborate to manage inventory and ensure expiring stock can be shifted between CMS and the various distributors preventing excessive expiry of ARVs.

### *2.3.5 Distribution and inventory management*

CMS will be responsible for the procurement of the private sector ARVs from the manufacturers or international suppliers. They will ensure that ARVs are received in-country on time as per the scheduling requirements set out by the forecasting task force. For CMS to fulfil this role effectively, the private pharmaceutical distributors will be required to submit forecasts of their ARV requirements to CMS quarterly, detailing their forecast requirements as well as estimates of six-weekly orders for

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<sup>4</sup> It is estimated that approximately 9.3% of PSEMAS patients on ARVs are on regimen that are not available through CMS.

one year. As such, each quarterly forecast submission will include the specific forecast for the next three months and estimates of stock requirements for the subsequent nine-month period. CMS will then use the forecast to ensure that the procurements of ARVs are done promptly. It will be the responsibility of CMS to ensure that adequate stock levels are maintained to provide the necessary supply to the private pharmaceutical distributors and ensure timely delivery.

Private pharmaceutical distributors will place their orders for ARVs with CMS every six weeks and collect stock once it is ready for dispatch. Orders should be dispatched within seven working days from when the orders are received by CMS. The private pharmaceutical distributors will maintain a minimum level of stock to ensure that they can fill the orders from private providers and to have sufficient buffer stock available to bridge any delays in the dispatching of stock from CMS.

While the private pharmaceutical distributors will be responsible for monitoring their stock levels, situations may arise where they require an interim or emergency supply of ARVs from CMS. The private pharmaceutical distributors shall ensure that such emergency orders are kept at a minimum by maintaining adequate buffer stock on hand in their warehousing facilities, but CMS shall cooperate and ensure that these emergency orders are dispatched within no more than seven working days. In situations where CMS also experiences stock-outs of certain ARVs, the private pharmaceutical distributors shall be informed and will be allowed to procure directly from their suppliers or international distributors. CMS shall be responsible for informing the private pharmaceutical distributors and shall in collaboration with these distributors inform Methealth and NAMAFA of the applicable changes in prices for the interim period. CMS shall then notify the private pharmaceutical distributors as well as Methealth and NAMAFA once stock of ARVs is available again and shall notify these parties of the prices applicable under the measures set out in section 2.3.6.

The purchasing system between private providers and private pharmaceutical distributors shall operate following the current setup, whereby private providers place orders with private pharmaceutical distributors who in turn deliver the ordered quantities of ARVs from their stock to the private providers in accordance with existing ordering and delivery systems. Deliveries will be made nationally using the existing distribution networks, and courier service providers of the private pharmaceutical distributors.

### 2.3.6 Cost management and tariff setting

The main aim of the pilot exercise is to generate cost savings for PSEMAS to free up resources for reallocation within the health sector. It will be critical to ensure that the costs of the centrally procured ARVs are appropriately managed and charged under the defined guidelines. The centrally procured ARVs will be charged to PSEMAS, private medical aid funds, and other private sector patients as follows:

Table 3: Pricing standards for pilot model

Price	Base cost	% mark-up	Charged by
CMS price	CMS cost	2% procurement fee <sup>5</sup>	CMS
	CMS cost	3% warehousing fee <sup>6</sup>	
	CMS cost	15% VAT	

<sup>5</sup> The rate of the proposed procurement fee is based on the rates used by other countries as identified through the review of similar approaches used in Kenya, South Africa and Zambia.

<sup>6</sup> The rate of the proposed warehousing fee is based on the rates used by other countries as identified through the review of similar approaches used in Kenya, South Africa and Zambia.

Price	Base cost	% mark-up	Charged by
Distributor price	CMS price	12.5% distribution fee <sup>7</sup>	Private pharmaceutical distributors
	CMS price	15% VAT	
Retail price	Distributor price excl. VAT	50% dispensing fee <sup>8</sup>	Private providers
	Distributor price excl. VAT	15% VAT	

The retail prices of the selected ARVs will be reviewed quarterly by the Inter-agency steering committee (refer to section 3.1 for additional details) to ensure that the prices reflect the CMS costs paid for the products plus the relevant fees of various stakeholders involved. These agreed-upon retail prices will be used as the applicable tariffs for the ARVs and will be used by Methealth as administrators of PSEMAS and NAMAF on behalf of the administrators of the private medical aid funds. Based on the quarterly reviews of price lists, the updated retail price lists will be shared with the administrators and NAMAF to ensure that the tariffs are updated in their databases. These updates will also be shared through PSN with all pharmacies so that their systems automatically charge the new prices. CMS will be responsible to maintain a record of the quarterly price lists and ensuring the updated pricelists are sent to administrators, NAMAF, and all pharmacies in a timely manner.

### 2.3.7 Payment mechanisms

The private pharmaceutical distributors will place orders for ARVs with CMS every six weeks. The orders will be dispatched to the distributors within seven working days, and CMS will issue invoices upon confirming that the orders are ready for dispatch. A dedicated account shall be opened by the MOF for this pilot project in the form of a revolving fund to manage all transactions including receipt of payments from the private pharmaceutical distributors, as well as processing payments for the stock of ARVs that CMS procures for distribution through the private sector. The private pharmaceutical distributors shall make payment to MOF revolving fund, and proof of payment will be required upon collection of the ARVs.

The payment terms and arrangements between the private pharmaceutical distributors and the private providers shall remain guided by the existing agreements and systems between these entities.

### 2.3.8 Claims management

Claims by the private providers from PSEMAS and other medical aid funds will be processed using the existing mechanisms and processes as the implementation of the pilot model will not have an impact on those procedures. However, PSEMAS and the private medical aid funds will incorporate the new tariff limits for the selected ARVs into their systems so that the maximum paid for claims for ARVs to private providers follows the retail prices defined by the inter-agency steering committee. Any ARV charged by pharmacists above the tariff amount will not be paid via the funds and flagged in the PSEMAS and private medical aid fund systems. These deviations from the set tariffs will be reported to MoHSS for investigation.

### 2.3.9 Data management and reporting

There is a need for a consistent flow of information to effectively manage the procurement and distribution of ARVs from the public through the private health system. This information will also be

<sup>7</sup> The distribution fee for private distributors is the rate that was identified as being the industry standard in Namibia during the key informant interviews conducted.

<sup>8</sup> The Pharmaceutical Society of Namibia has set a standard mark-up of 50% on all pharmaceuticals, which is to be applied by all of its members.

required for pilot monitoring to ensure that implementation effectively realizes cost savings while consistently meeting the demand for ARVs in the private sector. For this purpose, data will need to be collected and reported monthly from the private pharmaceutical distributors, the PSEMAS administrators (Methealth), NAMAFA on behalf of the private medical aid funds, and the private providers. The table below sets out the data requirements from each of these entities.

Table 4: Reporting requirements by type of entity

Entity	Data requirements (all disaggregated by regimen)
Private pharmaceutical distributors	<ul style="list-style-type: none"> <li>● Quantity of ARVs received from CMS</li> <li>● Quantities of ARVs distributed per private provider</li> <li>● Quantity of ARVs on hand at end of period</li> <li>● Quantity of ARVs that have expired</li> <li>● Stock-outs experienced by type of ARV</li> <li>● Length of stock out by type of ARV</li> </ul>
PSEMAS administrators i.e., Methealth	<ul style="list-style-type: none"> <li>● Number of patients to whom ARVs have been dispensed by regimen and private provider</li> <li>● Quantities of ARVs dispensed</li> <li>● Number of patients who have defaulted on treatment</li> <li>● Total amount spent by PSEMAS on ARVs</li> </ul>
NAMAFA	<ul style="list-style-type: none"> <li>● Number of patients to whom ARVs have been dispensed by regimen and private provider</li> <li>● Quantities of ARVs dispensed</li> <li>● Number of patients who have defaulted on treatment</li> <li>● Total amount spent by PSEMAS on ARVs</li> </ul>
Private providers	<ul style="list-style-type: none"> <li>● Number of patients to whom ARVs have been dispensed by regimen</li> <li>● Quantity of ARVs received</li> <li>● Quantities of ARVs dispensed (by PSEMAS patients, private medical aid fund patients and other private patients)</li> <li>● Quantity of ARVs on hand at end of period</li> <li>● Quantity of ARVs that have expired</li> <li>● Quantity of ARV stock losses</li> <li>● Stock-outs experienced by type of ARV</li> <li>● Length of stock out by type of ARV</li> </ul>
CMS	<ul style="list-style-type: none"> <li>● Quantity of ARVs purchased for the private sector</li> <li>● Quantities of ARVs dispatched to private pharmaceutical distributors</li> <li>● Quantity of ARVs procured for the private sector on hand at end of period</li> <li>● Quantity of ARVs procured for the private sector that have expired</li> <li>● Quantity of ARV stock losses of ARVs procured for the private sector</li> <li>● Stock-outs experienced by type of ARV procured for the private sector</li> </ul>



Entity	Data requirements (all disaggregated by regimen)
	<ul style="list-style-type: none"> <li>Length of stock out by type of ARV procured for the private sector</li> </ul>

These reports will need to be submitted to CMS on a monthly basis no later than 15 days after the end of each month.

### 2.3.10 Capacity building

Continuous capacity building of stakeholders involved in the pilot’s implementation will be integral to the pilot’s success. Therefore, capacity building will be used across the various levels of implementation.

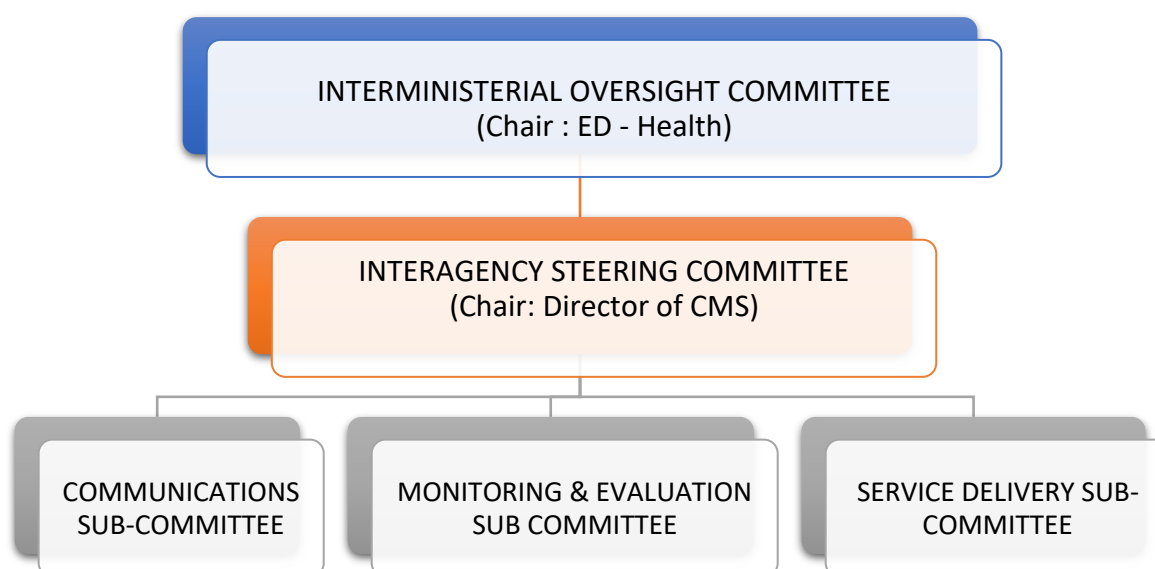
At CMS, the capacity building will primarily focus on recruiting additional staff to manage orders, forecast ARV costs, and manage ARV inventory for the private sector. The capacity building at this level will also include continuous training of the personnel involved in the implementation of pilot exercise and the expansion of the warehousing capacity of CMS.

## 3. Coordination and communication

### 3.1 Coordination structure

The success of the PSEMAS efficiency agenda and implementation of the pilot requires inputs from all stakeholders working in close collaboration to plan, implement and achieve the set efficiency goals. The following proposed coordination structures aim to support the implementation of the pilot study. The inter-ministerial oversight committee will oversee the overall coordination of the pilot program in the country, while the steering committee, supported by the various sub-committees, will focus on the operational management of the pilot implementation.

Figure 2: Proposed coordination structure



\*ED – Executive Director

Table 5 below highlights the key accountability mechanisms that will be implemented to facilitate the coordination, reporting, and communication of the pilot model, which will be essential for the management and oversight of the pilot.

*Table 5: Accountability mechanisms for coordination and reporting*

<b>Results areas</b>	<b>Activities</b>
Coordination areas	<ul style="list-style-type: none"> <li>● Inter-Agency Oversight Committee – Quarterly progress meetings</li> <li>● Inter-Agency Steering Committee – Monthly meetings</li> </ul>
Reporting and feedback mechanism	<ul style="list-style-type: none"> <li>● Monthly Reporting of routine data – sub-committees</li> <li>● Quarterly Report by Steering Committee on progress of pilot implementation</li> <li>● Quarterly national report by oversight on progress of pilot implementation and functioning of oversight functions</li> <li>● Establish functional complaint boxes</li> </ul>
Communication	<ul style="list-style-type: none"> <li>● Client information desks</li> <li>● Media Briefing</li> <li>● Information, education, and communication materials like brochures and fliers</li> </ul>

### 3.2 Communication for the pilot study

Communication for the pilot study will increase stakeholder awareness and engagement during the implementation period. The advocacy and communication plan will entail creating awareness and encouraging acceptance and buy-in by all the stakeholders. Coordinated by the Inter-agency steering committee, the implementation of the communication plan will leverage existing channels and platforms already in place. Any additional costs for communication shall be incurred by the respective stakeholders, in the spirit of creating a successful public-private partnership. Table 6 demonstrates the various roles to be played by key stakeholders in advocacy and communication during the pilot period.

*Table 6: Role of stakeholders in advocacy and communication during the pilot exercise*

<b>Stakeholder</b>	<b>Strategy</b>	<b>Objective</b>	<b>Activities</b>
<b>Ministry of Health and Social Services</b>	Information percolation and sharing within the Ministry staff	Create ambassadors for the pilot study within the Ministry	Meetings; Circulars; Publications; Website; Notice Board
	Raise awareness of pilot activities and expected roles	Ensure active engagement in the pilot activities	Meetings; Working groups
<b>PSEMAS Administrator</b>	Forge working relationships	Mobilize membership to support the pilot	Regular meetings; Strategic briefings; Brainstorming sessions
<b>Central Medical Stores</b>	Forge working relationships	Ensure their support for pilot implementation	Meetings; Working groups

Stakeholder	Strategy	Objective	Activities
Health care workers /Pharmacists	Create awareness on roles and responsibilities and empowerment to implement the pilot activities in their respective postings	Deliver affordable quality ARVs to the PSEMAS beneficiaries	Sensitization meetings, production of communication materials
Development Partners	Sensitize on the potential efficiency gains out of the pilot implementation	Support and mobilize resource for the pilot study	Round table meetings; Strategic briefings
NAMAF	Create awareness among the private medical aid funds, administrators, and providers	Support affiliated members for the pilot implementation	Meetings; Updated information on Website
Public Sector Union of Namibia	Create awareness for pilot to its members	Support its members for the pilot implementation	Regular meetings
Private Sector Distributors	Create awareness on roles and responsibilities and empowerment to implement the pilot activities	Optimize public private collaboration	Public-private dialogue; Strategic briefings
Namibia Medical / Professional Associations	Create awareness on roles and responsibilities and empowerment to implement the pilot activities	Optimize public private collaboration	Regular meetings; Strategic briefings
General Public	Create awareness on potential benefits of the new distribution model	Mobilize and manage expectations	Messaging through: Digital and Broadcast media, Traditional media Events
Media	Advocacy and visibility for the pilot	Optimize earned and paid communication mix	Print; Television; Radio; Adverts (including social media; OpEds (including social media)

## 4. Financing arrangements

### 4.1 Guidelines for use of the allocated pilot study funds

The pilot exercise funds allocated to the CMS will be utilized with other resources (the country's funds, donor funds). CMS will use the resources as per the below allocation components and ensure there is accountability for performance.

Table 7: Estimated amount allocated to CMS in the pilot exercise

Allocation Components (12 months period)	Rate (%)	Cost Allocation (NAD)	Cost (NAD) per Beneficiary under ART
Estimated cost of ARVs to PSEMAS beneficiaries in 2020 under the pilot exercise		30,409,310.95	1,179.94
Plus, 2021 Pharmaceutical inflation rate	3.68%	1,119,062.64	43.42
Plus, Procurement Fee	2%	630,567.49	24.47
Plus, Warehousing Fee	3%	945,851.21	36.70
<b>Total CMS allocation</b>		<b>33,104,792.27</b>	<b>1,284.53</b>

A total of NAD 33,104,792.27 will need to be allocated at the commencement of the pilot exercise to CMS to ensure steady availability of quality ARVs medicines to PSEMAS beneficiaries. This allocation will remain in the revolving fund to ensure continuity of the program beyond the pilot period and to manage the cash flow of CMS. The routine procurement of additional ARVs will be funded by the revenues generated by the sale of ARVs to private pharmaceutical distributors. The procurement fee and the warehousing fee collectively amount to NAD 1,576,418.70 and will be used to pay for the salaries of one additional pharmacist and one stock controller responsible for order management and dispatching of ARVs to private pharmaceutical distributors. These funds will also be used to cover any incremental operational costs incurred during the implementation of the pilot exercise.

Based on these estimates, PSEMAS will incur an estimated claim amount of NAD 64,243,987.50 for the year of the pilot which is 32% less than what it incurred in the previous year.

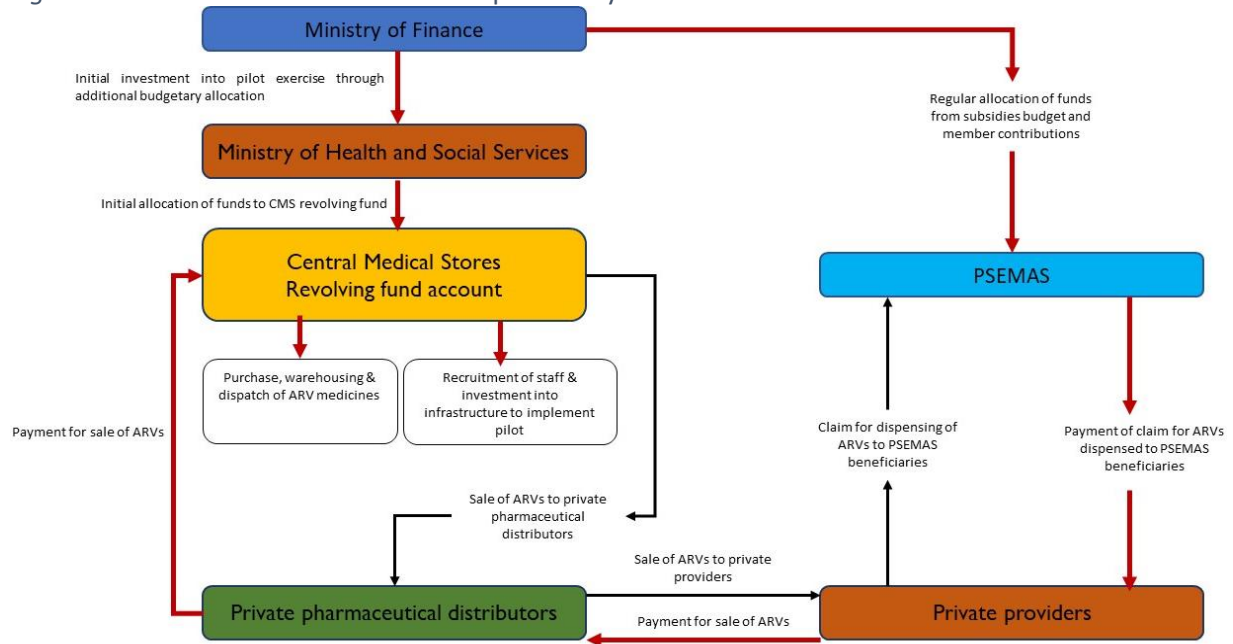
*Table 8: Estimated amount to be paid by PSEMAS during the pilot exercise*

<b>Components (12 months period)</b>	<b>Rate (%)</b>	<b>Cost Allocation (NAD)</b>	<b>Cost (NAD) per Beneficiary (NAD) under ARV</b>
<b>Total MoHSS, CMS Cost</b>		33,104,792.27	1,284.53
<b>Plus, Private Sector Distribution</b>	12.5%	4,138,099.03	160.57
<b>Plus, Mark up</b>	50%	18,621,445.65	722.55
<b>Plus, VAT on distribution &amp; mark-up</b>	15%	8,379,650.54	325.15
<b>Total Amount to be paid by PSEMAS</b>		<b>64,243,987.50</b>	<b>2,492.78</b>

## 4.2 Flow of funds

The successful implementation of the pilot phase will hinge on the efficiency with which the funds will flow to the CMS revolving fund. The flow will depend on the funds becoming available for CMS to support the procurement functions in the shortest time possible. As indicated in Figure 3, the funding flow model uses the red arrows to depict the flow of funds, while the black arrows depict the flow of other transactions.

Figure 3: Flow of funds structure for the pilot study



An initial investment of funds will be transferred by the MoF into its revolving fund account for the initial procurement of ARVs, which will then be replenished as soon as CMS starts selling the ARVs to the private pharmaceutical distributors. These funds will serve as start-up capital for the pilot exercise and will be maintained as operational cash flow in the CMS revolving fund to ensure adequate stock levels are maintained through regular procurement of ARVs to prevent any stockouts.

From the CMS revolving fund account, CMS will procure the ARVs required for the private sector, which will, in turn, be sold to the private pharmaceutical distributors with their monthly orders. The portion charged by CMS for the procurement and warehousing fees will be used to cover the costs of recruiting additional staff in the procurement department, while the remainder will be used for future procurements of ARVs.

Some of the staff are already in the procurement system will provide the much-needed technical capacity to the new team staff recruited.

## 5. Monitoring and Evaluation of pilot exercise

The pilot exercise of distributing centrally procured ARVs through private sector providers to PSEMAS beneficiaries should be implemented over at least one year. After this pilot phase, it is important to evaluate the effectiveness of the pilot model. This section describes how such an evaluation should be performed.

### 5.1 Purpose of evaluation

The main objective of the evaluation is to examine the overall impact, efficiency, and effectiveness (performance) of the pilot and its contribution to achieving the overall goal of potential cost savings on ARVs. Subsequently, the evaluation team will provide recommendations relating to the roll-out of the pilot model at a larger scale.

### 5.2 Evaluation approach

The MoHSS and CMS will be responsible for establishing a team to implement the evaluation of the pilot exercise, which will comprise employees from both MoHSS and CMS in addition to 1 – 2

independent evaluation consultants. The evaluation will be funded by the fees charged to the model by CMS as well as additional resources that may mobilize from donors or development partners.

The evaluation team will use a participatory approach seeking to establish the results and outputs of the pilot, not only based on progress reports but the perceptions and experiences of the stakeholders, including the private distributors, PSEMAS beneficiaries, PSEMAS, MoHSS, CMS, and others. The evaluation also considers findings on the ground as derived from the field visits. The participatory process will seek to ensure optimum relevance of findings and recommendations and enhance ownership of results. The information for the evaluation will be collected through literature reviews, key informant interviews (KII), and/or surveys to be completed by key informants. The results will be analysed to inform future policy decisions relating to the roll-out of the pilot model at a larger scale.

### 5.3 Indicators to measure the objectives of pilot study

To measure the success of the pilot model, the objectives and expected outcomes need to be clearly defined. Indicators have been established to measure the realisation of these objectives and outcomes, as indicated in the table below.

*Table 9: Objectives, outcomes and indicators for the pilot evaluation*

Objective	Outcome	Indicator
Achieve cost savings for PSEMAS on ARV claim expenditures	Increased savings realized by the MoF and PSEMAS on ARVs	% reduction in total per patient PSEMAS expenditures on ARVs
Promote sustainability for health and HIV	Private sectors orders pharmaceuticals through CMS	% of ARVs procured by the private sector that were procured through CMS
Improve management of procurement and distribution of ARVs	Timely ARVs delivery record/tracker	% of PSEMAS orders for ARVs delivered by CMS within 14 days of ordering
	Adequate stock of ARVs for distribution in private sector	Number of stock outs experienced at CMS, private pharmaceutical distributor and private provider level

### 5.4 Data collection

Data collection for the evaluation of the pilot model will be performed by means of a rapid literature review and KIIs.

- i. **Rapid literature review:** The rapid literature review will provide initial details on the model option chosen and how it was expected to operate. The goal is to aid the evaluation team to have a better understanding of the current and previous model of ARV distribution and what change was expected. Quantitative data will be collected from monthly progress reports, pilot operation reports, financial audited reports, expenditure, and claims records during the pilot period from PSEMAS as well as from the sampled pilot private facilities.
- ii. **KIIs:** KIIs will be conducted on purposefully selected key informants. Interview guides shall be structured based on the seven key thematic areas (listed in Annex 2 below) for effectively evaluating this pilot model.

Key informant interviews are expected to include but not be limited to:

- MoHSS
- PSEMAS
- CMS
- PSEMAS Beneficiaries
- Private Distributors
- Pharmaceutical Association of Namibia

The interview guides for the KIIs with each type of stakeholder are included in Annex 1.

## 5.5 Data analysis

Primary data (responses from KIIs) will be structured according to the evaluation questions and thematic analysis will capture emerging themes. In addition, secondary data will be drawn into the narrative and triangulated with the primary data findings to gain deeper insight into dominant messages and themes.

## 5.6 Timelines

The evaluation of the pilot model is expected to take three months and should be implemented one year after the commencement of the pilot period. The pilot model will continue to be implemented during the time that the pilot exercise is evaluated. The indicative timelines for the various activities of the evaluation are detailed below.

*Table 10: Timelines for the pilot evaluation*

Activity	Month 1	Month 2	Month 3
Finalize the evaluation protocol and questionnaire			
Finalize list of key informants (stakeholders)			
Conduct KIIs			
Consolidate data			
Analyze results			
Validation of preliminary results and recommended next steps			
Draft results report and recommendations			
Final report			

## 5.7 Evaluation results

A key output of the evaluation will be a report highlighting key findings including lessons identified, analyses of the results and recommendations to be used by MoHSS, MoF and PSEMAS to:

- Guide in decision making and define potential areas for cost savings for PSEMAS on ARV claim expenditures.
- Review of sustainability strategies for health and HIV by identifying opportunities for savings by the MoF and PSEMAS from lower medicine and supply costs, which could be reallocated to other high priority uses in the health system, such as to sustain HIV and other services currently dependent on donor funding.
- Improving management of procurement and distribution of ARVs between the government and private sector to support the sustainability, reduce inequities and achieve greater efficiencies within the health sector.

## 5.8 Results dissemination

At the end of the evaluation, the evaluation team will present provisional findings to the MoHSS, MoF, and PSEMAS Management Team. Findings will also be presented to the pharmaceutical association, participating facilities in the evaluation, and to the private distributors. The evaluation findings will be shared and discussed with the management of the MoF, MoHSS, PSEMAS, and private sectors. Further refinements will be made based on feedback, and the final results will be disseminated to all the above and policy makers, planners, and development partners.

## 5.9 Way forward

After this evaluation, the results should inform the following key actions:

- Relevance: Was the pilot relevant to the needs of MoHSS?
- Replicability: Can the pilot be duplicated to other settings?
- Policy recommendations: Should the pilot be continued or expanded to be rolled out at the national level? Should the model be expanded to include other medicines?

Detailed recommended next steps will be included in the results report of the evaluation to guide the MoHSS, PSEMAS, and the MoF on whether the implementation model should be continued, adapted, or scaled up for national roll-out.



## 6. Implementation Matrix

The implementation matrix aims to guide some of the key activities required to effectively implement the pilot exercise. This matrix is to be completed by the inter-agency steering committee by specifying the timeframes for the various activities and identifying the responsible person to implement the activity and the required resources. The matrix will also allow the steering committee to effectively monitor implementation progress, while the oversight committee can use the matrix as a tool for overseeing the implementation.

*Table 11: Implementation matrix*

No	Focus area	Activity description	Start date	End date	Responsible person	Required resources	Status	Date completed
1	Planning and developing of pilot structures	Establish the various coordination structures to bring all stakeholders on board						
		Conduct the various coordination structure meetings						
		Plan for the sensitization and capacity building of the private providers and private distributors on the pilot implementation						
		Preparation of a comprehensive procurement plan for ARVs						
		Identify enablers and engage them in preparation of the pilot						
		Define the set priorities, targets and the milestones						
2.	Increased availability of quality ARVs medicines	Recruit critical staff within CMS in readiness for the rollout						
		Reorganise and optimize existing human resources and infrastructure capacity within CMS						
		Procure and stock health facilities with sufficient ARV commodities						
3.	Advocacy communication and social mobilization	Develop communication strategy for the pilot						
		Launch pilot communication messages						
		Sensitization of the private providers/private distributors on the pilot						
		Review existing policies based on the evidence generated						

4	Financing aspect	MoF to release funds for the procurement of ARVs and non-ARV medicines						
		MoF to channel funds to the CMS revolving fund						
5	Monitoring & Evaluation	Joint baseline evaluation						
		Joint mid-term evaluation						
		Joint end-term evaluation						

## 7. Long-term recommendations

While the pilot model aims to improve the cost-effectiveness of PSEMAS in terms of the procurement and distribution of ARVs through the private sector, various other issues and inefficiencies were identified as part of this assessment. In recognition that many of these inefficiencies would take a longer timeframe to address, the recommendations detailed below should be considered for implementation beyond the roll-out of this pilot model. These recommendations aim to further improve efficiencies in the health sector and to free up additional resources within the health sector for reallocation to ensure equitable access to quality healthcare for all Namibians.

1. **Explore the feasibility of expanding the pilot model to other chronic medicines:** While this pilot exercise focuses exclusively on the distribution of centrally procured ARVs through the private sector, the opportunity exists to realise larger cost savings by expanding this model to other medicines, particularly chronic medication. Since chronic medication is another major cost-driver in the private health sector and tends to have relatively stable requirements, forecasting will probably be more accurate. This would be a suitable starting point to further expand the pilot model to increase its scope and realize even greater efficiencies for PSEMAS and the private health sector.
2. **Continuously build the capacity of CMS:** Based on recent assessments of CMS, it is acknowledged that there are significant capacity constraints within CMS to manage the procurement and distribution of pharmaceuticals effectively in the public sector and that the added burden of the private sector's pharmaceutical requirements cannot be absorbed by this already over-burdened system in its current state. There is a dire need to strengthen the capacity of CMS continuously, not only by adding to the human resource capacity but also by strengthening the infrastructure and warehousing capacity. It will be important to ensure that CMS has the necessary staff in place to manage the added workload, as well as the necessary warehousing and logistics capacity to manage the stock as required.
3. **Review pricing structures of private retail pharmacies:** It is noted that the private retail pharmacies in Namibia have a standardised pricing structure whereby these pharmacies add a 50% mark-up to their purchase price. This mark-up is meant to cover the costs of dispensing as well as the operations of the pharmacy. Benchmarking this mark-up to common practices in other countries shows that this rate of the mark-up is comparatively high. Acknowledging that there are ongoing legal proceedings and an investigation by the Competition Commission of Namibia regarding the issue of the rate of the mark-up, it is recommended that this pricing structure and approach is revisited. The mark-up model incentivized pharmacies to give preference to more expensive pharmaceutical products, while in itself also drives the costs of pharmaceuticals up excessively. A pricing structure of a standard dispensing fee is charged for each product dispensed by the pharmacy may be a more suitable approach. It is recommended that the MoHSS conducts a more in-depth review of possible pricing structures and issues guidance to regulate the private pharmaceutical industry to ensure affordable access to pharmaceuticals.
4. **Explore possibility of expanding District Health Information Software 2 (DHIS2) into the private sector for routine reporting:** The lack of regular access to data from the private health sector has been noted as a major gap and frustration by the MoHSS several years. Since the MoHSS has the mandate to coordinate the health response at a national level, it is critical for the Ministry to also have access to relevant information from the private sector. Given the opportunity for improved

coordination that arises through this pilot exercise, the MoHSS should use the opportunity to collaborate with the private sector to explore ways of ensuring a regular flow of data and information from the private sector to the MoHSS. One option of ensuring a consistent flow of information from the private sector would be to expand the DHIS2 to the private sector to allow for real-time data to be reported to the MoHSS without placing an excessive reporting burden on the private sector stakeholders.

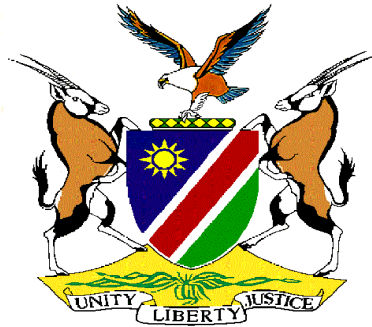
5. **Ensuring comprehensive list of pharmaceuticals:** The analyses performed to estimate the potential cost savings revealed that there are significant differences between the pharmaceutical products available in the private sector and those procured by CMS. A key concern noted by the private sector stakeholders was the Namibia Essential Medicines List (NEMList), which is a list of pharmaceutical products approved for procurement and dispensing through the public sector, is extremely limited and not updated regularly to reflect medical innovations and the introduction of newer, and sometimes more effective, medicines. Review and updates of NEMList are recommended on a more regular basis. This process could benefit from the private sector's engagement and cooperation, given their flexibility and expertise with many of the newer pharmaceutical products available on the market. The recommendation is that representatives of the private pharmaceutical sector are involved in the updating of the NEMList.

## Annex 1: Sample Memorandum of Understanding

# **PARTNERSHIP AGREEMENT**

**DATED** *(insert date)*

**Between**



## **MINISTRY OF HEALTH AND SOCIAL SERVICES, CENTRAL MEDICAL STORES**

**(herein referred to as MoHSS, CMS)**

**and**

*insert logo and name of private distributor*

**(herein referred to as a private distributor)**

**(MoHSS, CMS and *insert name of private distributor* each also referred to herein as a Party and jointly as the Parties)**

## I. General Background and Purpose

1. The Ministry of Finance (MoF) pays 85% of the claims for Public Sector Employee Medical Aid Scheme (PSEMAS) beneficiaries seeking services in the private sector. For medicines and supplies, these costs typically reflect much higher unit prices than what the Ministry of Health and Social Services (MoHSS) can secure. Higher medicine and supply prices contribute to PSEMAS spending more than twice as much per beneficiary (NAD 7,489) than the MoHSS spends per person who does not have medical aid coverage (NAD 3,545).
2. By purchasing larger volumes of medicines and supplies, the MoHSS is often able to secure better unit prices than those in Namibia's private health sector. Additionally, the MoF recently granted the MoHSS an exemption from the Public Procurement Act's preferences for domestic bidders, allowing for purchasing from international suppliers, which is anticipated to have a further positive impact on the prices of medicines and supplies. International suppliers enjoy a comparative advantage over domestic suppliers as they are able to negotiate significantly lower prices for medicines and supplies because of their large purchase volume, which in turn provides the MoHSS with more reasonable and sustainable prices.
3. A pilot model will be implemented whereby the MoHSS procures selected medicines and supplies for distribution to PSEMAS beneficiaries via the private sector providers that care for them. This could allow the MoF through PSEMAS to generate considerable savings by avoiding some of the private sector's high unit prices, while at the same time sustaining access to high-quality health commodities for PSEMAS beneficiaries.
4. The lessons that will be generated during the trial period of the new HIV medicines and supplies distribution model may be applied to additional health areas (e.g., medicines and supplies for chronic care).
5. Anticipated intervention Results will be: -
  - Increased purchasing power for the MoHSS as a result of greater procurement quantity.
  - Opportunities for savings by the MoF and PSEMAS from lower medicine and supply costs, which could be reallocated to other high priority uses in the health system, such as to sustain HIV and other services currently dependent on donor funding.
  - Strengthened collaboration between the MoHSS and MoF on efforts to promote sustainability for health and HIV and achieve greater efficiencies within the health sector.

## II. Partnership: Description and modalities

1. The **responsibilities of MoHSS, CMS** under this alliance will be to:
  1. Provide technical support in the development and launching of the pilot distribution model for ARVs to the private providers.
  2. Ensure reliable and timely supply of ARVs to private providers via the private distributors.
  3. Provide warehousing of ARVs and maintain adequate buffer stock levels to prevent stock-outs of ARVs.
  4. In collaboration with the private distributors, estimate and forecast the required quantities of ARVs and schedule the procurement in accordance with the estimated demand.
  5. Issue invoices for ARVs to the private distributor and notify them when the products are ready for dispatch.
  6. Dispatch ARVs as per the orders received from private distributors within seven (7) working days of receipt of the order, after confirming the payment was received.

7. Provide leadership and policy direction during the meetings of the Interagency Steering Committee in charge of the pilot program coordination.
8. Promote public-private partnership between CMS and private pharmaceutical distributors for the realisation of desired results through active involvement.
9. Monitor and evaluate initiatives to ensure concrete results are achieved in the pilot with partners active feedback mechanisms in place.
10. Document lessons learned and best practices during the pilot for continual improvement.
11. Review the pricing of ARVs on a quarterly basis to ensure alignment with purchase price paid and communicate prices of ARVs by issuing updated pricelists to private distributors on a quarterly basis.
12. Notify private providers, PSEMAS and administrators or private medical aid funds of any actual or anticipated stock-outs of ARVs.

All communications are to be forwarded to the following MoHSS, CMS contact:

**Name/Title/ Telephone/ Email:**

2. The **responsibilities of *insert name of private distributor*** under this alliance will be to:
  1. Provide technical support in the development and launching of the pilot distribution model for ARVs to the private providers.
  2. Ensure reliable and timely supply of ARVs purchased from CMS to private.
  3. Provide warehousing of ARVs and maintain adequate buffer stock levels to prevent stock-outs of ARVs.
  4. In collaboration with the private providers and CMS, estimate and forecast the required quantities of ARVs and schedule the procurement from CMS in accordance with the estimated demand.
  5. Order ARVs from CMS on the same schedule as public facilities (i.e. every 6 weeks), using the required forms and processes.
  6. Process payments for ARVs in accordance with invoice issued by CMS prior to collection of ARVs.
  7. Collect ARVs from CMS and ensure secure and appropriate storage and warehousing of ARVs until distribution to private providers.
  8. Distribute ARVs to private providers through usual distribution channels.
  9. Promote public-private partnership between CMS and private pharmaceutical distributors for the realisation of desired results through active involvement.
  10. Monitor and evaluate initiatives to ensure concrete results are achieved in the pilot with partners active feedback mechanisms in place.
  11. Document lessons learned and best practices during the pilot for continual improvement.
  12. Notify private providers, PSEMAS and administrators or private medical aid funds of any actual or anticipated stock-outs of ARVs.

All communications are to be forwarded to the following private distributor contact:

***Insert Name/Title/ Telephone/ Email:***

### III. Effective Date, Life, Amendments, And Termination

This agreement becomes effective on the date of the last signature of all the Parties and is expected to continue until **(Insert end date of agreement)**. In addition, this agreement may be modified or amended if all Parties agree in writing.

Any Party may terminate this agreement at any time without assigning any reason whatsoever but should endeavour to provide at least 30 days' written notices to the other Party of its desire to terminate this Memorandum.

It is mutually understood that this agreement is a non-binding, non-enforceable statement of mutual intentions. Nevertheless, the Parties in good faith pledge their mutual best efforts to achieve the targets, goals and objectives set forth above.

IN WITNESS WHEREOF, the Parties, acting through their duly authorized representatives, have caused this agreement to be signed in their names and delivered as of this day.

Signatures:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
*Name of MoHSS- CMS Official*

\_\_\_\_\_  
*Name of private distributor official*

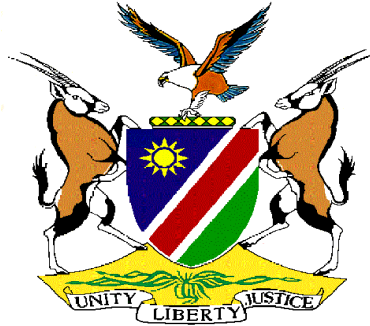
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Title

\_\_\_\_\_  
Title



# **PARTNERSHIP AGREEMENT**

**DATED** *(insert date)*



**Between**

**MINISTRY OF HEALTH AND SOCIAL SERVICES,  
CENTRAL MEDICAL STORES**

**(herein referred to as MoHSS, CMS)**

**and**

**MINISTRY OF FINANCE,  
PUBLIC SERVICE EMPLOYEE MEDICAL AID SCHEME**

**(herein referred to as a MoF, PSEMAS)**

**(MoHSS, CMS and MoF, PSEMAS each also referred to herein as a *Party* and jointly as  
the *Parties*)**

## I. General Background and Purpose

1. The Ministry of Finance (MoF) pays 85% of the claims for Public Sector Employee Medical Aid Scheme (PSEMAS) beneficiaries seeking services in the private sector. For medicines and supplies, these costs typically reflect much higher unit prices than what the Ministry of Health and Social Services (MoHSS) can secure. Higher medicine and supply prices contribute to PSEMAS spending more than twice as much per beneficiary (NAD 7,489) than the MoHSS spends per person who does not have medical aid coverage (NAD 3,545).
2. By purchasing larger volumes of medicines and supplies, the MoHSS is often able to secure better unit prices than those in Namibia's private health sector. Additionally, the MoF recently granted the MoHSS an exemption from the Public Procurement Act's preferences for domestic bidders, allowing for purchasing from international suppliers, which is anticipated to have a further positive impact on the prices of medicines and supplies. International suppliers enjoy a comparative advantage over domestic suppliers as they are able to negotiate significantly lower prices for medicines and supplies because of their large purchase volume, which in turn provides the MoHSS with more reasonable and sustainable prices.
3. A pilot model will be implemented whereby the MoHSS procures selected medicines and supplies for distribution to PSEMAS beneficiaries via the private sector providers that care for them. This could allow the MoF through PSEMAS to generate considerable savings by avoiding some of the private sector's high unit prices, while at the same time sustaining access to high-quality health commodities for PSEMAS beneficiaries.
4. The lessons that will be generated during the trial period of the new HIV medicines and supplies distribution model may be applied to additional health areas (e.g., medicines and supplies for chronic care).
5. Anticipated intervention Results will be: -
  - Increased purchasing power for the MoHSS as a result of greater procurement quantity.
  - Opportunities for savings by the MoF and PSEMAS from lower medicine and supply costs, which could be reallocated to other high priority uses in the health system, such as to sustain HIV and other services currently dependent on donor funding.
  - Strengthened collaboration between the MoHSS and MoF on efforts to promote sustainability for health and HIV and achieve greater efficiencies within the health sector.

## II. Partnership: Description and modalities

- I. The **responsibilities of MoHSS, CMS** under this alliance will be to:
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  5. Issue invoices for ARVs to the private distributor and notify them when the products are ready for dispatch.
  6. Dispatch ARVs as per the orders received from private distributors within seven (7) working days of receipt of the order, after confirming the payment was received.

7. Provide leadership and policy direction during the meetings of the Interagency Steering Committee in charge of the pilot program coordination.
8. Promote public-private partnership between CMS and private pharmaceutical distributors for the realisation of desired results through active involvement.
9. Monitor and evaluate initiatives to ensure concrete results are achieved in the pilot with partners active feedback mechanisms in place.
10. Document lessons learned and best practices during the pilot for continual improvement.
11. Review the pricing of ARVs on a quarterly basis to ensure alignment with purchase price paid and communicate prices of ARVs by issuing updated pricelists to private distributors on a quarterly basis.
12. Notify private providers, PSEMAS and administrators or private medical aid funds of any actual or anticipated stock-outs of ARVs.

All communications are to be forwarded to the following MoHSS, CMS contact:

**Insert Name/Title/ Telephone/ Email:**

2. The **responsibilities of MoF, PSEMAS** under this alliance will be to:
  1. Provide technical support in the development and launching of the pilot distribution model for ARVs to the private providers.
  2. Promote public-private partnership between CMS and private pharmaceutical distributors for the realisation of desired results through active involvement.
  3. Promote awareness of the pilot model, the potential cost savings and implications on depleting the annual limits to PSEMAS beneficiaries in consultation with the MoHSS and the Public Service Commission of Namibia.
  4. Monitor and evaluate initiatives to ensure concrete results are achieved in the pilot with partners active feedback mechanisms in place.
  5. Document lessons learned and best practices during the pilot for continual improvement.
  6. Review the pricing of ARVs on a quarterly basis to ensure alignment with purchase price paid and communicate prices of ARVs by issuing updated pricelists to private distributors on a quarterly basis.

All communications are to be forwarded to the following MoF, PSEMAS:

**Insert Name/Title/ Telephone/ Email**

### **III. Effective Date, Life, Amendments, And Termination**

This agreement becomes effective on the date of the last signature of all the Parties and is expected to continue until **(Insert end date of agreement)**. In addition, this agreement may be modified or amended if all Parties agree in writing.

Any Party may terminate this agreement at any time without assigning any reason whatsoever but should endeavour to provide at least 30 days' written notices to the other Party of its desire to terminate this Memorandum.

It is mutually understood that this agreement is a non-binding, non-enforceable statement of mutual intentions. Nevertheless, the Parties in good faith pledge their mutual best efforts to achieve the targets, goals and objectives set forth above.

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Date

\_\_\_\_\_  
*Name of MoHSS- CMS Official*

\_\_\_\_\_  
*Name of MoF - PSEMAS Official*

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

# **PARTNERSHIP AGREEMENT**

**DATED** *(insert date)*

**Between**



## **MINISTRY OF HELATH AND SOCIAL SERVICES, CENTRAL MEDICAL STORES**

**(herein referred to as MoHSS, CMS)**

**and**



**Pharmaceutical Society  
of Namibia**

## **PHARMACEUTICAL SOCIETY OF NAMIBIA**

**(herein referred as a PSN)**

**(MoHSS, CMS and PSN each also referred to herein as a *Party* and jointly as the *Parties*)**

## I. General Background and Purpose

1. The Ministry of Finance (MoF) pays 85% of the claims for Public Sector Employee Medical Aid Scheme (PSEMAS) beneficiaries seeking services in the private sector. For medicines and supplies, these costs typically reflect much higher unit prices than what the Ministry of Health and Social Services (MoHSS) can secure. Higher medicine and supply prices contribute to PSEMAS spending more than twice as much per beneficiary (NAD 7,489) than the MoHSS spends per person who does not have medical aid coverage (NAD 3,545).
2. By purchasing larger volumes of medicines and supplies, the MoHSS is often able to secure better unit prices than those in Namibia's private health sector. Additionally, the MoF recently granted the MoHSS an exemption from the Public Procurement Act's preferences for domestic bidders, allowing for purchasing from international suppliers, which is anticipated to have a further positive impact on the prices of medicines and supplies. International suppliers enjoy a comparative advantage over domestic suppliers as they are able to negotiate significantly lower prices for medicines and supplies because of their large purchase volume, which in turn provides the MoHSS with more reasonable and sustainable prices.
3. A pilot model will be implemented whereby the MoHSS procures selected medicines and supplies for distribution to PSEMAS beneficiaries via the private sector providers that care for them. This could allow the MoF through PSEMAS to generate considerable savings by avoiding some of the private sector's high unit prices, while at the same time sustaining access to high-quality health commodities for PSEMAS beneficiaries.
4. The lessons that will be generated during the trial period of the new HIV medicines and supplies distribution model may be applied to additional health areas (e.g., medicines and supplies for chronic care).
5. Anticipated intervention Results will be: -
  - Increased purchasing power for the MoHSS as a result of greater procurement quantity.
  - Opportunities for savings by the MoF and PSEMAS from lower medicine and supply costs, which could be reallocated to other high priority uses in the health system, such as to sustain HIV and other services currently dependent on donor funding.
  - Strengthened collaboration between the MoHSS and MoF on efforts to promote sustainability for health and HIV and achieve greater efficiencies within the health sector.

## II. Partnership: Description and modalities

1. The **responsibilities of MoHSS, CMS** under this alliance will be to:
  1. Provide technical support in the development and launching of the pilot distribution model for ARVs to the private providers.
  2. Ensure reliable and timely supply of ARVs to private providers via the private distributors.
  3. Provide warehousing of ARVs and maintain adequate buffer stock levels to prevent stock-outs of ARVs.
  4. In collaboration with the private distributors, estimate and forecast the required quantities of ARVs and schedule the procurement in accordance with the estimated demand.
  5. Issue invoices for ARVs to the private distributor and notify them when the products are ready for dispatch.

6. Dispatch ARVs as per the orders received from private distributors within seven (7) working days of receipt of the order, after confirming the payment was received.
7. Provide leadership and policy direction during the meetings of the Interagency Steering Committee in charge of the pilot program coordination.
8. Promote public-private partnership between CMS and private pharmaceutical distributors for the realisation of desired results through active involvement.
9. Monitor and evaluate initiatives to ensure concrete results are achieved in the pilot with partners active feedback mechanisms in place.
10. Document lessons learned and best practices during the pilot for continual improvement.
11. Review the pricing of ARVs on a quarterly basis to ensure alignment with purchase price paid and communicate prices of ARVs by issuing updated pricelists to private distributors on a quarterly basis.
12. Notify private providers, PSEMAS and administrators or private medical aid funds of any actual or anticipated stock-outs of ARVs.

All communications are to be forwarded to the following MoHSS, CMS contact:

**Insert Name/Title/ Telephone/ Email:**

2. The **responsibilities of PSN** under this alliance will be to:
  1. Provide Provide technical support in the development and launching of the pilot distribution model for ARVs to the private providers.
  2. Promote public-private partnership between CMS and private pharmaceutical distributors for the realisation of desired results through active involvement.
  3. Promote awareness of the pilot model, the potential cost savings and implications on depleting the annual limits to PSEMAS beneficiaries in consultation with the MoHSS and the Public Service Commission of Namibia.
  4. Communicate the pilot study content, design and results to private provider members.
  5. Monitor and evaluate initiatives to ensure concrete results are achieved in the pilot with partners active feedback mechanisms in place.
  6. Document lessons learned and best practices during the pilot for continual improvement.
  7. Review the pricing of ARVs on a quarterly basis to ensure alignment with purchase price paid and communicate prices of ARVs by issuing updated pricelists to private distributors on a quarterly basis.

All communications are to be forwarded to the following PSN contact:

**Insert Name/Title/ Telephone/ Email:**

### III. Effective Date, Life, Amendments, And Termination

This agreement becomes effective on the date of the last signature of all the Parties and is expected to continue until **(Insert end date of agreement)**. In addition, this agreement may be modified or amended if all Parties agree in writing.

Any Party may terminate this agreement at any time without assigning any reason whatsoever but should endeavour to provide at least 30 days' written notices to the other Party of its desire to terminate this Memorandum.

It is mutually understood that this agreement is a non-binding, non-enforceable statement of mutual intentions. Nevertheless, the Parties in good faith pledge their mutual best efforts to achieve the targets, goals and objectives set forth above.

IN WITNESS WHEREOF, the Parties, acting through their duly authorized representatives, have caused this agreement to be signed in their names and delivered as of this day.

Signatures:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of MoHSS- CMS Official

\_\_\_\_\_  
Name of PSN Official

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title



## Annex 2: Detailed calculations of potential cost savings

					POTENTIAL COST SAVING 2017				
Active Ingredients	Ingredients Dosage	PSEMAS 2017 Unit Price (NAD)	MOHSS 2017 Unit Price (NAD)	PSEMAS Quantity 2016/17	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff (P - C) (NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving (NAD)	Ratio MoHSS/PSEMAS
EMTRICITABINE, EFAVIRENZ, TENOFOVIRDISOPROXIL(fumarate)	200MG, 600MG, 300MG	475.21	92.32	66,017	177.60	297.61	168%	NAD 19,647,312.56	2.7
ZIDOVUDINE(AZI), LAMIVUDINE(3TC)	300MG, 150MG	245.36	100.95	19,728	194.20	51.16	26%	NAD 1,009,319.95	1.3
EFAVIRENZ	600MG	92.08	47.74	7,915	91.84	0.24	0%	NAD 1,917.78	1.0
RITONAVIR, LOPINAVIR		491.92	222.5	17,030	428.03	63.88	15%	NAD 1,087,909.65	1.1
TENOFOVIRDISOPROXIL(fumarate), EMTRICITABINE	300MG, 200MG	336.32	46.95	15,496	90.32	246.00	272%	NAD 3,811,992.01	3.7
RITONAVIR, ATAZANAVIR SULPHATE	100MG, 300MG	488.75	206.82	11,087	397.87	90.88	23%	NAD 1,007,578.45	1.2
NEVIRAPINE, LAMIVUDINE(3TC), TENOFOVIRDISOPROXIL(fumarate)	200MG, 150MG, 300MG	704.60	90.26	8,328	173.64	530.96	306%	NAD 4,421,824.54	4.1
EMTRICITABINE, EFAVIRENZ, RITONAVIR	200MG, 600MG, 100MG	467.45		6,240	0.00				
EFAVIRENZ	600MG	119.47	47.74	1,674	91.84	27.63	30%	NAD 46,259.92	1.3
COPPER, ASCORBIC ACID(VITAMIN C), TENOFOVIRDISOPROXIL(fumarate)	300MG	42.90	47.74	4,768	91.84	-48.94	-53%		0.5
TENOFOVIRDISOPROXIL(fumarate), EMTRICITABINE	300MG, 200MG	245.90	46.95	3,233	90.32	155.58	172%	NAD 503,000.39	2.7
DOLUTEGRAVIR	50MG	626.20	50.70	1,422	97.53	528.66	542%	NAD 751,761.54	6.4
TENOFOVIRDISOPROXIL(fumarate), EMTRICITABINE	300MG, 200MG	321.11	46.95	6,426	90.32	230.79	256%	NAD 1,483,043.48	3.6
ZIDOVUDINE(AZI), LAMIVUDINE(3TC)	300MG, 150MG	203.79	100.95	1,520	194.20	9.59	5%	NAD 14,569.93	1.0
TENOFOVIRDISOPROXIL(fumarate), LAMIVUDINE(3TC)	300MG, 300MG	447.39	56.67	3,662	109.02	338.37	310%	NAD 1,239,107.80	4.1
LAMIVUDINE(3TC)	150MG	86.92	23.32	1,839	44.86	42.06	94%	NAD 77,346.24	1.9
TENOFOVIRDISOPROXIL(fumarate)	300MG	222.14	47.74	575	91.84	130.30	142%	NAD 74,925.31	2.4
NEVIRAPINE	200MG	166.70	90.26	2,185	173.64	-6.94	-4%	-NAD 15,167.07	1.0
RALTEGRAVIR	400MG	692.95	1200.54	3,332	2,309.54	-1,616.59	-70%		0.3
EMTRICITABINE, EFAVIRENZ, ZIDOVUDINE(AZI)	200MG, 600MG, 300MG	830.01		3,008	0.00				
ZIDOVUDINE(AZI)	300MG	229.39	60.86	4,959	117.08	112.31	96%	NAD 556,945.54	2.0
NEVIRAPINE	200MG	125.20	90.26	948	173.64	-48.44	-28%		0.7
ZIDOVUDINE(AZI), LAMIVUDINE(3TC)	300MG, 150MG	255.28	100.95	4,863	194.20	61.07	31%	NAD 297,004.92	1.3
EFAVIRENZ	600MG	120.48	47.74	16,272	91.84	28.64	31%	NAD 466,016.87	1.3
RITONAVIR		85.95	118.62	2,323	228.20	-142.24	-62%		0.4
NEVIRAPINE		182.58	90.26	710	173.64	8.94	5%	NAD 6,348.89	1.1
DARUNAVIR	600MG	654.82	948.58	1,920	1,824.83	-1,170.01	-64%		0.4
RITONAVIR, ATAZANAVIR SULPHATE	100MG, 300MG	490.47	206.81	1,209	397.85	92.62	23%	NAD 111,981.84	1.2
MINERALS, AMINO ACIDS, RITONAVIR	100MG	58.65	116.74	169	224.58	-165.93	-74%		0.3
TENOFOVIRDISOPROXIL(fumarate), EMTRICITABINE	300MG, 200MG	330.25	46.95	1,916	90.32	239.93	266%	NAD 459,699.17	3.7
ZIDOVUDINE(AZI)	300MG	108.15	60.86	426	117.08	-8.93	-8%	-NAD 3,802.74	0.9
LAMIVUDINE(3TC), ABACAVIR SULPHATE	300MG, 600MG	402.62		1,012	0.00				
LAMIVUDINE(3TC), EFAVIRENZ, EFAVIRENZ	150MG, 600MG, 200MG	730.34		299	0.00				
ABACAVIR SULPHATE	300MG	484.81	113.90	1,484	219.12	265.70	121%	NAD 394,292.03	2.2
ABACAVIR SULPHATE	300MG	615.80	113.90	425	219.12	396.69	181%	NAD 168,591.60	2.8
EFAVIRENZ	600MG	118.97	47.74	2,784	91.84	27.13	30%	NAD 75,528.74	1.3
RITONAVIR, LOPINAVIR	50MG, 200MG	428.94	222.50	945	428.03	0.91	0%	NAD 855.49	1.0
ETRAVIRINE	100MG	280.68	491.15	737	944.85	-664.17	-70%		0.3
NEVIRAPINE	200MG		90.26		173.64	-173.64	-100%	NAD 0.00	0.0
EMTRICITABINE, EFAVIRENZ, TENOFOVIRDISOPROXIL(fumarate)	200MG, 600MG, 300MG	471.79	92.32	33	177.60	294.19	166%	NAD 9,708.20	2.7
ZIDOVUDINE(AZI)	300MG	101.95	60.86		117.08	-15.13	-13%	NAD 0.00	0.9
TENOFOVIRDISOPROXIL(fumarate), EMTRICITABINE	300MG, 200MG	271.46	46.95		90.32	181.14	201%	NAD 0.00	3.0
EMTRICITABINE, EFAVIRENZ, NEVIRAPINE	200MG, 600MG, 200MG				0.00				
TENOFOVIR, LAMIVUDINE(fumarate), LAMIVUDINE		445.93	56.67	208	109.02	336.91	309%	NAD 70,077.82	4.1
ZIDOVUDINE(AZI), LAMIVUDINE(3TC)	300MG, 150MG	264.46	100.95	1,304	194.20	70.26	36%	NAD 91,612.91	1.4

					POTENTIAL COST SAVING 2017				
Active Ingredients	Ingredients Dosage	PSEMAS 2017 Unit Price (NAD)	MOHSS 2017 Unit Price (NAD)	PSEMAS Quantity 2016/17	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff (P - C) (NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving (NAD)	Ratio MoHSS/PSEMAS
DOLUTEGRAVIR		587.74	50.70	1,217	97.53	490.21	503%	NAD 596,585.57	6.0
TENOFOVIRDISOPROXIL(fumarate)		191.34	47.74	600	91.84	99.50	108%	NAD 59,697.20	2.1
LAMIVUDINE(3TC)	10MG/ML	95.08	41.94	482	80.68	14.39	18%	NAD 6,937.90	1.2
EFAVIRENZ	600MG	123.61	47.74	141	91.84	31.77	35%	NAD 4,479.51	1.3
BIOCYDIN,BETA-SITOSTEROL,NEVIRAPINE	100MG,40MG,200MG	54.37		120	0.00				
DOLUTEGRAVIR,ABACAVIRSULPHATE,LAMIVUDINE(3TC)	50MG,600MG,300MG				0.00				
LAMIVUDINE(3TC)	150MG	31.77	23.32	159	44.86	-13.09	-29%		0.7
EFAVIRENZ	200MG	122.77	25.87	158	49.77	73.00	147%	NAD 11,534.64	2.5
ABACAVIRSULPHATE	300MG	610.47	113.90	250	219.12	391.36	179%	NAD 97,839.64	2.8
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	266.42	100.95	123	194.20	72.22	37%	NAD 8,883.03	1.4
EMTRICITABINE,EFAVIRENZ,VITAMINSANDMINERALS	200MG,600MG	646.12		226	0.00				
LAMIVUDINE(3TC)	150MG	70.16	23.32	276	44.86	25.30	56%	NAD 6,981.44	1.6
NEVIRAPINE	200MG	165.50	31.46	3,119	60.52	104.98	173%	NAD 327,435.16	2.7
NEVIRAPINE,LAMIVUDINE(3TC),CHILDRENSMULTIVITAMINS	200MG,150MG,REF MN	677.92	90.26	447	173.64	504.28	290%	NAD 225,414.35	3.9
STAVUDINE(STV)	30MG	38.99	49.28	364	94.80	-55.81	-59%		0.4
RITONAVIR		36.68		226	0.00				
EMTRICITABINE,EFAVIRENZ,EFAVIRENZ	200MG,600MG,200MG	451.61		602	0.00				
RITONAVIR,LOPINAVIR	20MG/ML,80MG/ML	180.75	377.48	191	726.18	-545.43	-75%		0.2
RITONAVIR,LOPINAVIR	50MG,200MG	394.54	222.50		428.03	-33.49	-8%	NAD 0.00	0.9
EFAVIRENZ	600MG	161.88	47.74	17	91.84	70.04	76%	NAD 1,190.61	1.8
EFAVIRENZ	600MG	114.68	47.74	1,141	91.84	22.84	25%	NAD 26,062.20	1.2
ZIDOVUDINE(AZT)	100MG	178.31		382	0.00				
LAMIVUDINE(3TC)	10MG/ML	89.84	41.94	33	80.68	9.16	11%	NAD 302.34	1.1
ABACAVIRSULPHATE	20MG/ML	561.71	101.90	142	196.03	365.68	187%	NAD 51,925.93	2.9
OMEGA-3TRIGLYCERIDES,ANTIOXIDANTS,ZIDOVUDINE(AZT)	855MG,15MG,300MG	239.01		44	0.00				
NEVIRAPINE		221.71	147.11	156	283.00	-61.28	-22%		0.8
ATAZANAVIR		221.03		144	0.00				
EFAVIRENZ	50MG	37.19		136	0.00				
ATAZANAVIRSULPHATE	200MG	360.67	710.12	144	1,366.09	-1,005.43	-74%		0.3
LAMIVUDINE(3TC),ABACAVIRSULPHATE	300MG,600MG	324.95			0.00				
EFAVIRENZ	200MG	257.80	25.87	54	49.77	208.03	418%	NAD 11,233.67	5.2
TENOFOVIRDISOPROXIL(fumarate)	300MG	278.62	47.74	1,137	91.84	186.78	203%	NAD 212,373.08	3.0
RITONAVIR	100MG	49.70	118.62	66	228.20	-178.49	-78%		0.2
LAMIVUDINE(3TC)	10MG/ML	85.79	41.94	10	80.68	5.10	6%	NAD 51.04	1.1
STAVUDINE		25.03	49.28	8	94.80	-69.74	-74%		0.3
STAVUDINE(STV)	20MG	44.75	44.08	174	84.80	-40.05	-47%		0.5
ZIDOVUDINE(AZT)	250MG	328.22	60.86	248	117.08	211.14	180%	NAD 52,362.15	2.8
ATAZANAVIRSULPHATE	300MG	202.95		59	0.00				
NEVIRAPINE,LAMIVUDINE(3TC),NEVIRAPINE	50MG,30MG,200MG		90.26		173.64	-173.64	-100%	NAD 0.00	0.0
OMEGA-3TRIGLYCERIDES,ANTIOXIDANTS,ZIDOVUDINE(AZT)	855MG,15MG,300MG	303.48		18	0.00				
ATAZANAVIRSULPHATE	200MG	614.08		11	0.00				
NEVIRAPINE	200MG	259.69	90.26	4	173.64	86.05	50%	NAD 344.21	1.5
LAMIVUDINE(3TC)		103.54		43	0.00				
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIRDISOPROXIL(fumarate)	50MG,30MG,300MG	1051.05		119	0.00				
ATAZANAVIRSULPHATE	150MG	469.59		4	0.00				
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	250.83	100.95	244	194.20	56.63	29%	NAD 13,816.64	1.3

					POTENTIAL COST SAVING 2017				
Active Ingredients	Ingredients Dosage	PSEMAS 2017 Unit Price (NAD)	MOHSS 2017 Unit Price (NAD)	PSEMAS Quantity 2016/17	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff (P - C) (NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving (NAD)	Ratio MoHSS/PSEMAS
EFAVIRENZ	50MG	28.16		11	0.00				
ABACAVIR SULPHATE	20MG/ML	391.26	101.90	17	196.03	195.23	100%	NAD 3,318.93	2.0
RITONAVIR,ATAZANAVIR SULPHATE	100MG,300MG		206.81		397.85	-397.85	-100%	NAD 0.00	0.0
NEVIRAPINE	200MG		90.26		173.64	-173.64	-100%	NAD 0.00	0.0
ABACAVIR SULPHATE	20MG/ML	536.53	101.90		196.03	340.50	174%	NAD 0.00	2.7
RILPIVIRINE	25MG	45.53		2	0.00				
LAMIVUDINE		60.37	23.32	963	44.86	15.51	35%	NAD 14,933.10	1.3
LAMIVUDINE		122.68	23.32	3	44.86	77.81	173%	NAD 233.44	2.7
TENOFOVIR DISOPROXIL		224.24	47.74	99	91.84	132.40	144%	NAD 13,107.63	2.4
DARUNAVIR	600MG	941.00	948.58	23	1,824.83	-883.83	-48%		0.5
LOPINAVIR		199.40		2	0.00				
LAMIVUDINE(3TC)	10MG/ML	119.23	41.94	14	80.68	38.55	48%	NAD 539.67	1.5
TENOFOVIR DISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	236.53	46.95	12	90.32	146.21	162%	NAD 1,754.52	2.6
ETRAVIRINE		1406.04		15	0.00				
DARUNAVIR		747.33		34	0.00				
ZIDOVUDINE(AZI)	50MG/5ML	389.50	40.06	88	77.07	312.43	405%	NAD 27,494.06	5.1
NEVIRAPINE		221.04	90.26	61	173.64	47.40	27%	NAD 2,891.50	1.3
TENOFOVIR DISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	870.81	46.95	6	90.32	780.49	864%	NAD 4,682.92	9.6
ZIDOVUDINE(AZI),LAMIVUDINE(3TC)	30MG,60MG	315.44		9	0.00				
ABACAVIR SULPHATE	300MG	758.63	113.90	4	219.12	539.51	246%	NAD 2,158.04	3.5
RITONAVIR,LOPINAVIR	25MG,100MG	127.71	126.08	13	242.55	-114.84	-47%		0.5
ZIDOVUDINE(AZI)	300MG	150.00	60.86		117.08	32.92	28%	NAD 0.00	1.3
EMTRICITABINE,EFVIRENZ,TENOFOVIR DISOPROXIL(fumarate)	200MG,600MG,300MG	457.45	92.32		177.60	279.85	158%	NAD 0.00	2.6
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIR DISOPROXIL(fumarate)	200MG,150MG,300MG		90.26		173.64	-173.64	-100%	NAD 0.00	0.0
EFVIRENZ	200MG	106.09	25.87	6	49.77	56.32	113%	NAD 337.95	2.1
NEVIRAPINE	10MG/ML	143.98	147.11	14	283.00	-139.02	-49%		0.5
ATAZANAVIR		728.69		2	0.00				
EFVIRENZ	600MG	147.77	47.74	164	91.84	55.93	61%	NAD 9,171.89	1.6
ATAZANAVIR SULPHATE	300MG				0.00				
RALTEGRAVIR	100MG	256.40	444.30	3	854.72	-598.32	-70%		0.3
EFVIRENZ	600MG	125.78	47.74		91.84	33.94	37%	NAD 0.00	1.4
ZIDOVUDINE					0.00				
TENOFOVIR DISOPROXIL(fumarate)	300MG	391.15	47.74		91.84	299.31	326%	NAD 0.00	4.3
EFVIRENZ	600MG	145.00	47.74		91.84	53.16	58%	NAD 0.00	1.6
RITONAVIR	80MG/ML				0.00				
ZIDOVUDINE					0.00				
TENOFOVIR DISOPROXIL		120.41	47.74	187	91.84	28.57	31%	NAD 5,343.46	1.3
NEVIRAPINE	200MG	144.51	31.46		60.52	83.99	139%	NAD 0.00	2.4
ATAZANAVIR SULPHATE	150MG	368.27		8	0.00				
TENOFOVIR DISOPROXIL(fumarate)	300MG	122.43	47.74	3	91.84	30.59	33%	NAD 91.77	1.3
ZIDOVUDINE(AZI)					0.00				
RITONAVIR,LOPINAVIR	50MG,200MG		222.50		428.03	-428.03	-100%	NAD 0.00	0.0
TENOFOVIR DISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	603.65	46.95		90.32	513.33	568%	NAD 0.00	6.7
LAMIVUDINE(3TC),EFVIRENZ,VITAMIND3(CHOLECALCIFEROL)	300MG,400MG,400IU (I	795.04	92.64		178.22	616.82	346%	NAD 0.00	4.5
EFVIRENZ	600MG	145.00	47.74		91.84	53.16	58%	NAD 0.00	1.6
MINERALS,ANTIOXIDANTS,TENOFOVIR DISOPROXIL(fumarate)	300MG	43.92	47.74		91.84	-47.92	-52%	NAD 0.00	0.5

					POTENTIAL COST SAVING 2017				
Active Ingredients	Ingredients Dosage	PSEMAS 2017 Unit Price (NAD)	MOHSS 2017 Unit Price (NAD)	PSEMAS Quantity 2016/17	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff (P - C) (NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving (NAD)	Ratio MoHSS/PSEMAS
ABACAVIR SULPHATE	300MG	486.16	113.90		219.12	267.04	122%	NAD 0.00	2.2
TENOFOVIR DISOPROXIL (fumarate)	300MG	148.73	47.74		91.84	56.89	62%	NAD 0.00	1.6
LAMIVUDINE (3TC)	10MG/ML	136.46	41.94		80.68	55.78	69%	NAD 0.00	1.7
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	236.37	100.95		194.20	42.17	22%	NAD 0.00	1.2
NEVIRAPINE			90.26		173.64	-173.64	-100%	NAD 0.00	0.0
NEVIRAPINE		177.64	147.11		283.00	-105.37	-37%	NAD 0.00	0.6
TENOFOVIR DISOPROXIL (fumarate), EMTRICITABINE		294.33	46.95		90.32	204.01	226%	NAD 0.00	3.3
NEVIRAPINE	200MG		90.26		173.64	-173.64	-100%	NAD 0.00	0.0
ZIDOVUDINE (AZT)	50MG/5ML	289.57	31.18		59.98	229.59	383%	NAD 0.00	4.8
TENOFOVIR DISOPROXIL		105.36	47.74	127	91.84	13.52	15%	NAD 1,716.92	1.1
TENOFOVIR DISOPROXIL (fumarate)	300MG	180.17	47.74	1	91.84	88.33	96%	NAD 88.33	2.0
FERROUSSULPHATE, ASCORBIC ACID (VITAMIN C), ATAZANAVIR SULPHATE	150MG, 40MG, 200MG	56.65		9	0.00				
EFAVIRENZ	600MG	145.00	47.74		91.84	53.16	58%	NAD 0.00	1.6
TENOFOVIR DISOPROXIL (fumarate)	300MG	167.25	47.74		91.84	75.41	82%	NAD 0.00	1.8
DARUNAVIR	300MG	436.96		83	0.00				
RALTEGRAVIR	25MG	106.17		2	0.00				
COPPER, ASCORBIC ACID (VITAMIN C), TENOFOVIR DISOPROXIL (fumarate)	300MG	90.49	47.74		91.84	-1.35	-1%	NAD 0.00	1.0
LAMIVUDINE (3TC), ABACAVIR SULPHATE	300MG, 600MG	594.46			0.00				
LAMIVUDINE (3TC)	150MG	89.36	23.32		44.86	44.50	99%	NAD 0.00	2.0
LOPINAVIR, RITONAVIR		681.38	126.08		242.55	438.83	181%	NAD 0.00	2.8
TENOFOVIR DISOPROXIL (fumarate)		176.30	47.74		91.84	84.46	92%	NAD 0.00	1.9
EFAVIRENZ	600MG	120.64	47.74	4,553	91.84	28.80	31%	NAD 131,134.56	1.3
NEVIRAPINE	200MG	167.50	90.26	4,469	173.64	-6.14	-4%	-NAD 27,422.60	1.0
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	201.45	100.95	1,633	194.20	7.24	4%	NAD 11,829.64	1.0
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	251.57	100.95	1,324	194.20	57.36	30%	NAD 75,949.41	1.3
DIDANOSINE		126.03	416.89	100	801.99	-675.96	-84%		0.2
ATAZANAVIR SULPHATE	200MG	347.55		70	0.00				
DIDANOSINE		164.76	416.89	49	801.99	-637.23	-79%		0.2
DIDANOSINE		194.55	416.89	48	801.99	-607.44	-76%		0.2
ATAZANAVIR SULPHATE	150MG	215.64		18	0.00				
DIDANOSINE		172.70	416.89	17	801.99	-629.29	-78%		0.2
ATAZANAVIR		128.17		14	0.00				
TENOFOVIR DISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	239.83	46.95	12	90.32	149.51	166%	NAD 1,794.12	2.7
LAMIVUDINE		77.58	41.94	8	80.68	-3.10	-4%	-NAD 24.82	1.0
EFAVIRENZ	200MG	132.57	25.87	6	49.77	82.80	166%	NAD 496.83	2.7
OMEGA 6, MULTIVITAMINS, ZIDOVUDINE (AZT)	250MG	308.98	60.86	4	117.08	191.90	164%	NAD 767.60	2.6
TENOFOVIR DISOPROXIL (fumarate)	300MG	105.95	47.74	4	91.84	14.11	15%	NAD 56.44	1.2
EFAVIRENZ	600MG	90.41	47.74	3	91.84	-1.43	-2%	-NAD 4.29	1.0
STAVUDINE		31.84	44.08	3	84.80	-52.95	-62%		0.4
EFAVIRENZ	200MG	179.69	25.87	2	49.77	129.92	261%	NAD 259.85	3.6
LAMIVUDINE		56.44		2	0.00				
RALTEGRAVIR		731.05	1200.54	2	2,309.54	-1,578.49	-68%		0.3
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	165.13	100.95	2	194.20	-29.08	-15%		0.9
ATAZANAVIR SULPHATE	200MG	281.75	710.12	1	1,366.09	-1,084.34	-79%		0.2
NEVIRAPINE, LAMIVUDINE (3TC), LAMIVUDINE (3TC)	200MG, 150MG, 150MG	365.67	90.26	1	173.64	192.03	111%	NAD 192.03	2.1
TENOFOVIR DISOPROXIL (fumarate), LAMIVUDINE (3TC)	300MG, 300MG	261.03	56.67	1	109.02	152.01	139%	NAD 152.01	2.4
					<b>192.25</b>	<b>1.47</b>	<b>0.77</b>	<b>NAD 39,865,906.97</b>	<b>1.77</b>

					POTENTIAL COST SAVING 2018				
Active Ingredients	Ingredients Dosage	PSEMAS_2018 Unit Price (NAD)	MOHSS_2018 Unit Price (NAD)	PSEMAS_Quantity 2017/18	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff (P - C) (NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS
EMTRICITABINE, EFAVIRENZ, TENOFOVIRDISOPROXIL (fumarate)	200MG, 600MG, 300MG	464.88	83.28	72,379	160.21	304.67	190%	NAD 22,051,478.99	2.9
ZIDOVUDINE(AZT), LAMIVUDINE(3TC)	300MG, 150MG	238.27	89.78	17,245	172.71	65.56	38%	NAD 1,130,507.22	1.4
EFAVIRENZ	600MG	87.95	47.74	16,952	91.84	-3.89	-4%	(NAD 65,991.84)	1.0
RITONAVIR, LOPINAVIR		419.39	269.32	16,240	518.10	-98.71	-19%		0.8
TENOFOVIRDISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	314.68	68.14	15,167	131.08	183.59	140%	NAD 2,784,542.36	2.4
RITONAVIR, ATAZANAVIR, SULPHATE	100MG, 300MG	475.34	273.88	11,600	526.88	-51.54	-10%	(NAD 597,808.50)	0.9
NEVIRAPINE, LAMIVUDINE(3TC), TENOFOVIRDISOPROXIL (fumarate)	200MG, 150MG, 300MG	728.96	90.26	8,618	173.64	555.32	320%	NAD 4,785,764.63	4.2
EMTRICITABINE, EFAVIRENZ, RITONAVIR	200MG, 600MG, 100MG	449.55		7,301	0.00				
EFAVIRENZ	600MG	131.65	47.74	7,228	91.84	39.81	43%	NAD 287,735.95	1.4
COPPER, ASCORBIC ACID (VITAMIN C), TENOFOVIRDISOPROXIL (fumarate)	300MG	48.89	45.12	5,325	86.80	-37.91	-44%		0.6
TENOFOVIRDISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	236.96	68.14	4,921	131.08	105.88	81%	NAD 521,036.05	1.8
DOLUTEGRAVIR	50MG	618.65	50.70	4,562	97.53	521.11	534%	NAD 2,377,323.02	6.3
TENOFOVIRDISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	333.94	68.14	3,957	131.08	202.86	155%	NAD 802,714.98	2.5
ZIDOVUDINE(AZT), LAMIVUDINE(3TC)	300MG, 150MG	202.72	89.78	3,866	172.71	30.01	17%	NAD 116,005.98	1.2
TENOFOVIRDISOPROXIL (fumarate), LAMIVUDINE(3TC)	300MG, 300MG	410.05	56.67	3,314	109.02	301.03	276%	NAD 997,601.14	3.8
LAMIVUDINE(3TC)	150MG	77.88	89.68	3,241	172.52	-94.64	-55%		0.5
TENOFOVIRDISOPROXIL (fumarate)	300MG	214.62	45.12	3,167	86.80	127.82	147%	NAD 404,793.43	2.5
NEVIRAPINE	200MG	154.86	90.26	3,058	173.64	-18.78	-11%	(NAD 57,436.88)	0.9
RALTEGRAVIR	400MG	659.01	1,200.54	3,027	2,309.54	-1,650.53	-71%		0.3
EMTRICITABINE, EFAVIRENZ, ZIDOVUDINE(AZT)	200MG, 600MG, 300MG	763.18		2,913	0.00				
ZIDOVUDINE(AZT)	300MG	237.29	87.24	2,815	167.83	69.46	41%	NAD 195,522.38	1.4
NEVIRAPINE	200MG	122.25	90.26	2,806	173.64	-51.39	-30%		0.7
ZIDOVUDINE(AZT), LAMIVUDINE(3TC)	300MG, 150MG	252.88	89.78	2,619	172.71	80.17	46%	NAD 209,966.06	1.5
EFAVIRENZ	600MG	117.00	47.74	2,467	91.84	25.16	27%	NAD 62,077.36	1.3
RITONAVIR		89.61	118.62	2,371	228.20	-138.59	-61%		0.4
NEVIRAPINE		204.67	90.26	2,152	173.64	31.03	18%	NAD 66,772.01	1.2
DARUNAVIR	600MG	623.62	948.58	2,105	1,824.83	-1,201.21	-66%		0.3
RITONAVIR, ATAZANAVIR, SULPHATE	100MG, 300MG	439.61	273.88	1,984	526.88	-87.26	-17%		0.8
MINERALS, AMINO ACIDS, RITONAVIR	100MG	60.30	116.74	1,831	224.58	-164.28	-73%		0.3
TENOFOVIRDISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	428.25	68.14	1,815	131.08	297.17	227%	NAD 539,356.20	3.3
ZIDOVUDINE(AZT)	300MG	100.86	87.24	1,476	167.83	-66.97	-40%		0.6
LAMIVUDINE(3TC), ABACAVIR, SULPHATE	300MG, 600MG	433.22		1,324	0.00				
LAMIVUDINE(3TC), EFAVIRENZ, EFAVIRENZ	150MG, 600MG, 200MG	716.72		1,299	0.00				
ABACAVIR, SULPHATE	300MG	481.28	158.26	1,115	304.45	176.82	58%	NAD 197,157.26	1.6
ABACAVIR, SULPHATE	300MG	841.08	158.26	1,059	304.45	536.63	176%	NAD 568,290.01	2.8
EFAVIRENZ	600MG	116.20	47.74	1,013	91.84	24.36	27%	NAD 24,672.77	1.3
RITONAVIR, LOPINAVIR	50MG, 200MG	301.23	269.32	904	518.10	-216.87	-42%		0.6
ETRAVIRINE	100MG	296.98	488.48	829	939.71	-642.73	-68%		0.3
NEVIRAPINE	200MG	158.68	90.26	712	173.64	-14.95	-9%	(NAD 10,647.23)	0.9
EMTRICITABINE, EFAVIRENZ, TENOFOVIRDISOPROXIL (fumarate)	200MG, 600MG, 300MG	484.90	83.28	650	160.21	324.69	203%	NAD 211,048.83	3.0
ZIDOVUDINE(AZT)	300MG	101.95	87.24	592	167.83	-65.88	-39%		0.6
TENOFOVIRDISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	271.46	68.14	576	131.08	140.38	107%	NAD 80,856.31	2.1
EMTRICITABINE, EFAVIRENZ, NEVIRAPINE	200MG, 600MG, 200MG	397.51		573	0.00				
TENOFOVIR, LAMIVUDINE (fumarate), LAMIVUDINE		411.17	56.67	563	109.02	302.15	277%	NAD 170,108.60	3.8
ZIDOVUDINE(AZT), LAMIVUDINE(3TC)	300MG, 150MG	247.78	89.78	562	172.71	75.07	43%	NAD 42,189.36	1.4

Active ingredients	Ingredients Dosage	PSEMAS_2018 Unit Price (NAD)	MOHSS_2018 Unit Price (NAD)	PSEMAS_Quantity 2017/18	POTENTIAL COST SAVING 2018					
					MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff (P-C) ( NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS	
DOLUTEGRAVIR		658.63	50.70	549	97.53	561.09	575%	NAD 308,040.17	6.8	
TENOFOVIRDISOPROXIL(fumarate)		232.33	45.12	506	86.80	145.53	168%	NAD 73,639.38	2.7	
LAMIVUDINE(3TC)	10MG/ML	105.98	41.94	395	80.68	25.30	31%	NAD 9,994.23	1.3	
EFAVIRENZ	600MG	196.67	47.74	349	91.84	104.83	114%	NAD 36,584.39	2.1	
BIOCYDIN,BETA-SITOSTEROL,NEVIRAPINE	100MG,40MG,200MG	74.00		333	0.00					
DOLUTEGRAVIR,ABACAVIRSULPHATE,LAMIVUDINE(3TC)	50MG,600MG,300MG	1403.66		298	0.00					
LAMIVUDINE(3TC)	150MG	28.86	89.68	266	172.52	-143.66	-83%		0.2	
EFAVIRENZ	200MG	84.26	165.96	255	319.27	-235.00	-74%		0.3	
ABACAVIRSULPHATE	300MG	736.72	158.26	235	304.45	432.27	142%	NAD 101,583.73	2.4	
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	251.45	89.78	220	172.71	78.73	46%	NAD 17,320.87	1.5	
EMTRICITABINE,EFAVIRENZ,VITAMINSANDMINERALS	200MG,600MG	793.56		218	0.00					
LAMIVUDINE(3TC)	150MG	81.56	89.68	213	172.52	-90.97	-53%		0.5	
NEVIRAPINE	200MG	155.22	31.46	180	60.52	94.70	156%	NAD 17,046.32	2.6	
NEVIRAPINE,LAMIVUDINE(3TC),CHILDRENSMULTI VITAMINS	200MG,150MG,REF MNI	723.47	90.26	177	173.64	549.83	317%	NAD 97,319.74	4.2	
STAVUDINE(STV)	30MG	39.16	49.28	174	94.80	-55.64	-59%		0.4	
RITONAVIR		45.05		170	0.00					
EMTRICITABINE,EFAVIRENZ,EFAVIRENZ	200MG,600MG,200MG	431.38		166	0.00					
RITONAVIR,LOPINAVIR	20MG/ML,80MG/ML	327.62	377.48	159	726.18	-398.56	-55%		0.5	
RITONAVIR,LOPINAVIR	50MG,200MG	394.54	269.32	155	518.10	-123.56	-24%		0.8	
EFAVIRENZ	600MG	129.61	47.74	150	91.84	37.77	41%	NAD 5,665.08	1.4	
EFAVIRENZ	600MG	119.76	47.74	142	91.84	27.92	30%	NAD 3,965.02	1.3	
ZIDOVUDINE(AZT)	100MG	167.98		141	0.00					
LAMIVUDINE(3TC)	10MG/ML	82.35	41.94	118	80.68	1.67	2%	NAD 197.15	1.0	
ABACAVIRSULPHATE	20MG/ML	804.47	96.06	117	184.80	619.68	335%	NAD 72,502.51	4.4	
OMEGA-3TRI GLYCERIDES,ANTIOXIDANTS,ZIDOVUDINE(AZT)	855MG,15MG,300MG	234.24		111	0.00					
NEVIRAPINE		329.65	147.11	106	283.00	46.65	16%	NAD 4,944.99	1.2	
ATAZANAVIR		258.26		104	0.00					
EFAVIRENZ	50MG	24.21		102	0.00					
ATAZANAVIRSULPHATE	200MG	459.09	751.15	99	1,445.02	-985.93	-68%		0.3	
LAMIVUDINE(3TC),ABACAVIRSULPHATE	300MG,600MG	324.95		96	0.00					
EFAVIRENZ	200MG	230.24	165.96	96	319.27	-89.03	-28%		0.7	
TENOFOVIRDISOPROXIL(fumarate)	300MG	224.51	45.12	93	86.80	137.71	159%	NAD 12,806.67	2.6	
RITONAVIR	100MG	45.85	118.56	92	228.08	-182.23	-80%		0.2	
LAMIVUDINE(3TC)	10MG/ML	46.41	41.94	85	80.68	-34.27	-42%		0.6	
STAVUDINE		34.50	49.28	75	94.80	-60.30	-64%		0.4	
STAVUDINE(STV)	20MG	60.97	44.08	73	84.80	-23.83	-28%		0.7	
ZIDOVUDINE(AZT)	250MG	289.71	60.86	71	117.08	172.63	147%	NAD 12,257.02	2.5	
ATAZANAVIRSULPHATE	300MG	337.08		68	0.00					
NEVIRAPINE,LAMIVUDINE(3TC),NEVIRAPINE	50MG,30MG,200MG	919.09	90.26	62	173.64	745.46	429%	NAD 46,218.21	5.3	
OMEGA-3TRI GLYCERIDES,ANTIOXIDANTS,ZIDOVUDINE(AZT)	855MG,15MG,300MG	709.93		61	0.00					
ATAZANAVIRSULPHATE	200MG	586.66		59	0.00					
NEVIRAPINE	200MG	173.73	90.26	55	173.64	0.10	0%	NAD 5.24	1.0	
LAMIVUDINE(3TC)		108.29		55	0.00					
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIRDISOPROXIL(fumarate)	50MG,30MG,300MG	771.96		54	0.00					
ATAZANAVIRSULPHATE	150MG	489.52		52	0.00					
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	262.04	89.78	50	172.71	89.33	52%	NAD 4,466.36	1.5	

					POTENTIAL COST SAVING 2018					
Active ingredients	Ingredients Dosage	PSEMAS 2018 Unit Price (NAD)	MOHSS 2018 Unit Price (NAD)	PSEMAS Quantity 2017/18	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff ( P - C ) ( NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS	
EFAVIRENZ	50MG	55.25		44	0.00					
ABACAVIR SULPHATE	20MG/ML	262.41	96.06	40	184.80	77.61	42%	NAD 3,104.58	1.4	
RITONAVIR,ATAZANAVIR SULPHATE	100MG,300MG	471.35	273.88	38	526.88	-55.53	-11%	(NAD 2,110.06)	0.9	
NEVIRAPINE	200MG	185.65	90.26	38	173.64	12.01	7%	NAD 456.37	1.1	
ABACAVIR SULPHATE	20MG/ML	536.53	96.06	33	184.80	351.74	190%	NAD 11,607.31	2.9	
RILPIVIRINE	25MG	42.53		30	0.00					
LAMIVUDINE		49.85	89.68	26	172.52	-122.67	-71%		0.3	
LAMIVUDINE		84.15	89.68	26	172.52	-88.37	-51%		0.5	
TENOFOVIR DISOPROXIL		248.22	45.12	25	86.80	161.42	186%	NAD 4,035.45	2.9	
DARUNAVIR	600MG	720.13	948.59	21	1,824.85	-1,104.72	-61%		0.4	
LOPINAVIR		66.74		18	0.00					
LAMIVUDINE(3TC)	10MG/ML	86.52	41.94	16	80.68	5.84	7%	NAD 93.44	1.1	
TENOFOVIR DISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	390.83	68.14	16	131.08	259.74	198%	NAD 4,155.85	3.0	
ETRAVIRINE		942.43		16	0.00					
DARUNAVIR		1389.31		15	0.00					
ZIDOVUDINE(AZT)	50MG/5ML	475.76	40.06	13	77.07	398.69	517%	NAD 5,183.00	6.2	
NEVIRAPINE		221.23	90.26	13	173.64	47.59	27%	NAD 618.68	1.3	
TENOFOVIR DISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	354.49	68.14	12	131.08	223.41	170%	NAD 2,680.87	2.7	
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	30MG,60MG	207.11		12	0.00					
ABACAVIR SULPHATE	300MG	567.43	158.26	11	304.45	262.98	86%	NAD 2,892.80	1.9	
RITONAVIR,LOPINAVIR	25MG,100MG	98.29	126.08	11	242.55	-144.25	-59%		0.4	
ZIDOVUDINE(AZT)	300MG	150.00	87.24	11	167.83	-17.83	-11%	(NAD 196.16)	0.9	
EMTRICITABINE,EFAVIRENZ,TENOFOVIR DISOPROXIL(fumarate)	200MG,600MG,300MG	457.45	83.28	10	160.21	297.24	186%	NAD 2,972.43	2.9	
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIR DISOPROXIL(fumarate)	200MG,150MG,300MG	565.94	90.26	9	173.64	392.30	226%	NAD 3,530.74	3.3	
EFAVIRENZ	200MG	74.47	165.96	9	319.27	-244.80	-77%		0.2	
NEVIRAPINE	10MG/ML	269.91	147.11	9	283.00	-13.10	-5%	(NAD 117.86)	1.0	
ATAZANAVIR		345.45		6	0.00					
EFAVIRENZ	600MG	150.54	47.74	5	91.84	58.70	64%	NAD 293.50	1.6	
ATAZANAVIR SULPHATE	300MG	403.58		4	0.00					
RALTEGRAVIR	100MG	342.50	444.30	4	854.72	-512.22	-60%		0.4	
EFAVIRENZ	600MG	125.78	47.74	4	91.84	33.94	37%	NAD 135.76	1.4	
ZIDOVUDINE		202.47		4	0.00					
TENOFOVIR DISOPROXIL(fumarate)	300MG	391.15	45.12	3	86.80	304.35	351%	NAD 913.05	4.5	
EFAVIRENZ	600MG	97.11	47.74	3	91.84	5.27	6%	NAD 15.82	1.1	
RITONAVIR	80MG/ML	87.60		3	0.00					
ZIDOVUDINE		183.99		3	0.00					
TENOFOVIR DISOPROXIL		111.96	45.12	2	86.80	25.16	29%	NAD 50.32	1.3	
NEVIRAPINE	200MG	144.51	31.46	2	60.52	83.99	139%	NAD 167.98	2.4	
ATAZANAVIR SULPHATE	150MG	368.27		2	0.00					
TENOFOVIR DISOPROXIL(fumarate)	300MG	422.42	45.12	1	86.80	335.62	387%	NAD 335.62	4.9	
ZIDOVUDINE(AZT)		91.70		1	0.00					
RITONAVIR,LOPINAVIR	50MG,200MG	471.79	269.32	1	518.10	-46.31	-9%	(NAD 46.31)	0.9	
TENOFOVIR DISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	603.65	68.14	1	131.08	472.57	361%	NAD 472.57	4.6	
LAMIVUDINE(3TC),EFAVIRENZ,VITAMIN D3(CHOLECALCIFEROL)	300MG,400MG,400IU (1	795.04	72.64	1	139.74	655.30	469%	NAD 0.00	5.7	
EFAVIRENZ	600MG	145.00	47.74	1	91.84	53.16	58%	NAD 0.00	1.6	
MINERALS,ANTI OXIDANTS,TENOFOVIR DISOPROXIL(fumarate)	300MG	43.92	45.12	1	86.80	-42.88	-49%	NAD 0.00	0.5	

Active ingredients	Ingredients Dosage	PSEMAS 2018 Unit Price (NAD)	MOHSS 2018 Unit Price (NAD)	PSEMAS Quantity 2017/18	POTENTIAL COST SAVING 2018					
					MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff ( P - C ) ( NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS	
ABACAVIR/SULPHATE	300MG	486.16	158.26		304.45	181.71		60%	NAD 0.00	1.6
TENOFOVIR DISOPROXIL (fumarate)	300MG	148.73	45.12		86.80	61.93		71%	NAD 0.00	1.7
LAMIVUDINE (3TC)	10MG/ML	136.46	41.94		80.68	55.78		69%	NAD 0.00	1.7
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	236.37	89.78		172.71	63.66		37%	NAD 0.00	1.4
NEVIRAPINE		90.26			173.64	-173.64		-100%	NAD 0.00	0.0
NEVIRAPINE		177.64	147.11		283.00	-105.36		-37%	NAD 0.00	0.6
TENOFOVIR DISOPROXIL (fumarate), EMTRICITABINE		294.33	68.14		131.08	163.25		125%	NAD 0.00	2.2
NEVIRAPINE	200MG	90.26			173.64	-173.64		-100%	NAD 0.00	0.0
ZIDOVUDINE (AZT)	50MG/5ML	289.57	31.18		59.98	229.59		383%	NAD 0.00	4.8
TENOFOVIR DISOPROXIL		101.62	45.12		86.80	14.82		17%	NAD 0.00	1.2
TENOFOVIR DISOPROXIL (fumarate)	300MG	180.17	45.12		86.80	93.37		108%	NAD 0.00	2.1
FERROUS SULPHATE, ASCORBIC ACID (VITAMIN C), ATAZANAVIR SULPHATE	150MG, 40MG, 200MG				0.00					
EFAVIRENZ	600MG	145.00	47.74		91.84	53.16		58%	NAD 0.00	1.6
TENOFOVIR DISOPROXIL (fumarate)	300MG	167.25	45.12		86.80	80.45		93%	NAD 0.00	1.9
DARUNAVIR	300MG				0.00					
RALTEGRAVIR	25MG				0.00					
COPPER, ASCORBIC ACID (VITAMIN C), TENOFOVIR DISOPROXIL (fumarate)	300MG	90.49	45.12		86.80	3.69		4%	NAD 0.00	1.0
LAMIVUDINE (3TC), ABACAVIR/SULPHATE	300MG, 600MG	594.46			0.00					
LAMIVUDINE (3TC)	150MG	89.36	89.68		172.52	-83.16		-48%	NAD 0.00	0.5
LOPINAVIR, RITONAVIR		681.38	126.08		242.55	438.83		181%	NAD 0.00	2.8
TENOFOVIR DISOPROXIL FUMARATE		176.30	45.12		86.80	89.50		103%	NAD 0.00	2.0
EFAVIRENZ	600MG	120.64	47.74		91.84	28.80		31%	NAD 0.00	1.3
NEVIRAPINE	200MG	90.26			173.64	-173.64		-100%	NAD 0.00	0.0
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	201.45	89.78		172.71	28.74		17%	NAD 0.00	1.2
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	251.57	89.78		172.71	78.86		46%	NAD 0.00	1.5
DIDANOSINE		126.03	416.89		801.99	-675.96		-84%	NAD 0.00	0.2
ATAZANAVIR/SULPHATE	200MG				0.00					
DIDANOSINE		164.76	416.89		801.99	-637.23		-79%	NAD 0.00	0.2
DIDANOSINE		194.55	416.89		801.99	-607.44		-76%	NAD 0.00	0.2
ATAZANAVIR/SULPHATE	150MG				0.00					
DIDANOSINE		164.76	416.89		801.99	-637.23		-79%	NAD 0.00	0.2
ATAZANAVIR					0.00					
TENOFOVIR DISOPROXIL (fumarate), EMTRICITABINE	300MG, 200MG	239.83	68.14		131.08	108.75		83%	NAD 0.00	1.8
LAMIVUDINE		41.94			80.68	-80.68		-100%	NAD 0.00	0.0
EFAVIRENZ	200MG	132.57	165.96		319.27	-186.70		-58%	NAD 0.00	0.4
OMEGA 6, MULTIVITAMINS, ZIDOVUDINE (AZT)	250MG	308.98	60.86		117.08	191.90		164%	NAD 0.00	2.6
TENOFOVIR DISOPROXIL (fumarate)	300MG	105.95	45.12		86.80	19.15		22%	NAD 0.00	1.2
EFAVIRENZ	600MG	47.74			91.84	-91.84		-100%	NAD 0.00	0.0
STAVUDINE		44.08			84.80	-84.80		-100%	NAD 0.00	0.0
EFAVIRENZ	200MG	179.69	165.96		319.27	-139.58		-44%	NAD 0.00	0.6
LAMIVUDINE					0.00					
RALTEGRAVIR		731.05	1200.54		2,309.54	-1,578.49		-68%	NAD 0.00	0.3
ZIDOVUDINE (AZT), LAMIVUDINE (3TC)	300MG, 150MG	165.13	89.78		172.71	-7.58		-4%	NAD 0.00	1.0
ATAZANAVIR/SULPHATE	200MG	281.75	751.45		1,445.60	-1,163.85		-81%	NAD 0.00	0.2
NEVIRAPINE, LAMIVUDINE (3TC), LAMIVUDINE (3TC)	200MG, 150MG, 150MG		90.26		173.64	-173.64		-100%	NAD 0.00	0.0
TENOFOVIR DISOPROXIL (fumarate), LAMIVUDINE (3TC)	300MG, 300MG	410.05	56.67		109.02	301.03		276%	NAD 0.00	3.8
					<b>212.21</b>	<b>-9.28</b>			<b>NAD 38,761,439.26</b>	<b>1.59</b>



					POTENTIAL COST SAVING 2019					
Active Ingredients	Ingredients Dosage	PSEMAS 2019 Unit Price (NAD)	MOHSS 2019 Unit Price ( NAD)	PSEMAS Quantity 2018/19	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff ( P -C)( NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS	
EMTRICITABINE,EFAVIRENZ,TENOFOVIRDISOPROXIL(fumarate)	200MG,600MG,300MG	467.28	83.28	75,025	160.21	307.07	192%	NAD 23,037,722.61	2.9	
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	240.71	78.70	16,018	151.40	89.31	59%	NAD 1,430,586.12	1.6	
EFAVIRENZ	600MG	88.90	47.74	14,823	91.84	-2.94	-3%	(NAD 43,555.90)	1.0	
RITONAVIR,LOPINAVIR		440.74	298.84	14,698	574.89	-134.15	-23%		0.8	
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	320.34	78.63	12,971	151.26	169.07	112%	NAD 2,193,056.67	2.1	
RITONAVIR,ATAZANAVIRSULPHATE	100MG,300MG	477.73	198.40	12,660	381.67	96.06	25%	NAD 1,216,155.31	1.3	
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIRDISOPROXIL(fumarate)	200MG,150MG,300MG	732.07	116.77	7,428	224.64	507.43	226%	NAD 3,769,224.15	3.3	
EMTRICITABINE,EFAVIRENZ,RITONAVIR	200MG,600MG,100MG	458.24		291	0.00					
EFAVIRENZ	600MG	132.31	47.74	8,152	91.84	40.47	44%	NAD 329,886.06	1.4	
COPPER,ASCORBICACID(VITAMINC),TENOFOVIRDISOPROXIL(fumara	300MG	48.74	41.03	5,299	78.93	-30.19	-38%		0.6	
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	238.51	78.63	8,362	151.26	87.25	58%	NAD 729,561.54	1.6	
DOLUTEGRAVIR	50MG	612.89	240.45	6,332	462.57	150.33	32%	NAD 951,876.59	1.3	
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	326.29	78.63	198	151.26	175.02	116%	NAD 34,654.68	2.2	
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	202.61	78.70	3,881	151.40	51.21	34%	NAD 198,731.81	1.3	
TENOFOVIRDISOPROXIL(fumarate),LAMIVUDINE(3TC)	300MG,300MG	423.82	49.47	2,347	95.17	328.65	345%	NAD 771,340.14	4.5	
LAMIVUDINE(3TC)	150MG	79.52	33.51	2,781	64.46	15.06	23%	NAD 41,876.65	1.2	
TENOFOVIRDISOPROXIL(fumarate)	300MG	210.70	41.03	894	78.93	131.77	167%	NAD 117,804.46	2.7	
NEVIRAPINE	200MG	160.76	35.36	4,275	68.02	92.74	136%	NAD 396,464.67	2.4	
RALTEGRAVIR	400MG	673.60	1200.54	2,367	2,309.54	-1,635.94	-71%		0.3	
EMTRICITABINE,EFAVIRENZ,ZIDOVUDINE(AZT)	200MG,600MG,300MG	787.88		2,933	0.00					
ZIDOVUDINE(AZT)	300MG	232.88	97.09	1,795	186.78	46.10	25%	NAD 82,747.30	1.2	
NEVIRAPINE	200MG	123.19	116.77	906	224.64	-101.45	-45%		0.5	
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	252.13	78.70	1,792	151.40	100.73	67%	NAD 180,507.90	1.7	
EFAVIRENZ	600MG	119.88	47.74	259	91.84	28.04	31%	NAD 7,263.52	1.3	
RITONAVIR		86.00	116.74	1,996	224.58	-138.58	-62%		0.4	
NEVIRAPINE		198.86	116.77	27	224.64	-25.78	-11%	(NAD 696.15)	0.9	
DARUNAVIR	600MG	637.53	1009.86	1,978	1,942.72	-1,305.19	-67%		0.3	
RITONAVIR,ATAZANAVIRSULPHATE	100MG,300MG	454.02	195.41	387	375.92	78.10	21%	NAD 30,226.01	1.2	
MINERALS,AMINOACIDS,RITONAVIR	100MG	63.42	116.74	5,927	224.58	-161.16	-72%		0.3	
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	370.37	78.63	1,065	151.26	219.10	145%	NAD 233,343.22	2.4	
ZIDOVUDINE(AZT)	300MG	100.62	97.09	3,315	186.78	-86.16	-46%		0.5	
LAMIVUDINE(3TC),ABACAVIRSULPHATE	300MG,600MG	427.10		1,221	0.00					
LAMIVUDINE(3TC),EFAVIRENZ,EFAVIRENZ	150MG,600MG,200MG	715.11		570	0.00					
ABACAVIRSULPHATE	300MG	498.69	129.83	1,765	249.76	248.93	100%	NAD 439,367.46	2.0	
ABACAVIRSULPHATE	300MG	769.86	129.83	244	249.76	520.10	208%	NAD 126,903.41	3.1	
EFAVIRENZ	600MG	115.62	47.74	695	91.84	23.78	26%	NAD 16,529.15	1.3	
RITONAVIR,LOPINAVIR	50MG,200MG	354.10	298.84	486	574.89	-220.79	-38%		0.6	
ETRAVIRINE	100MG	306.99	488.48	757	939.71	-632.72	-67%		0.3	
NEVIRAPINE	200MG	163.38	116.77	2,031	224.64	-61.26	-27%		0.7	
EMTRICITABINE,EFAVIRENZ,TENOFOVIRDISOPROXIL(fumarate)	200MG,600MG,300MG	484.84	83.28	505	160.21	324.63	203%	NAD 163,939.16	3.0	
ZIDOVUDINE(AZT)	300MG	107.08	97.09	481	186.78	-79.69	-43%		0.6	
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	279.43	78.63	2,859	151.26	128.16	85%	NAD 366,417.64	1.8	
EMTRICITABINE,EFAVIRENZ,NEVIRAPINE	200MG,600MG,200MG	421.90		3,182	0.00					
TENOFOVIR,LAMIVUDINE(fumarate),LAMIVUDINE		403.70	56.67	955	109.02	294.68	270%	NAD 281,421.72	3.7	
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	257.82	78.70	69	151.40	106.42	70%	NAD 7,343.32	1.7	
DOLUTEGRAVIR		610.72	240.35	478	462.37	148.35	32%	NAD 70,909.34	1.3	

					POTENTIAL COST SAVING 2019				
Active Ingredients	Ingredients Dosage	PSEMAS 2019 Unit Price (NAD)	MOHSS 2019 Unit Price (NAD)	PSEMAS Quantity 2018/19	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff ( P -C)( NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MOHSS/PSEMAS
TENOFOVIRDISOPROXIL(fumarate)		206.67	41.03	1,657	78.93	127.74	162%	NAD 211,667.00	2.6
LAMIVUDINE(3TC)	10MG/ML	99.10	74.98	545	144.24	-45.14	-31%		0.7
EFAVIRENZ	600MG	175.39	47.74	50	91.84	83.55	91%	NAD 4,177.64	1.9
BIOCYDIN,BETA-SITOSTEROL,NEVIRAPINE	100MG,40MG,200MG	69.56		376	0.00				
DOLUTEGRAVIR,ABACAVIRSLPHATE,LAMIVUDINE(3TC)	50MG,600MG,300MG	1398.74		1,083	0.00				
LAMIVUDINE(3TC)	150MG	29.84	33.51	166	64.46	-34.62	-54%		0.5
EFAVIRENZ	200MG	90.71	198.99	345	382.81	-292.10	-76%		0.2
ABACAVIRSLPHATE	300MG	664.53	129.83	21	249.76	414.77	166%	NAD 8,710.12	2.7
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	245.00	78.70	141	151.40	93.60	62%	NAD 13,198.09	1.6
EMTRICITABINE,EFAVIRENZ,VITAMINSANDMINERALS	200MG,600MG	759.56		211	0.00				
LAMIVUDINE(3TC)	150MG	77.86	33.51	100	64.46	13.40	21%	NAD 1,339.51	1.2
NEVIRAPINE	200MG	164.81	35.36	83	68.02	96.79	142%	NAD 8,033.25	2.4
NEVIRAPINE,LAMIVUDINE(3TC),CHILDRENSMULTIVITAMINS	200MG,150MG,REF MN	720.82	116.77	368	224.64	496.18	221%	NAD 182,594.10	3.2
STAVUDINE(STV)	30MG	38.40	49.28	122	94.80	-56.39	-59%		0.4
RITONAVIR		40.99		90	0.00				
EMTRICITABINE,EFAVIRENZ,EFAVIRENZ	200MG,600MG,200MG	438.72		682	0.00				
RITONAVIR,LOPINAVIR	20MG/ML,80MG/ML	271.64	377.48	167	726.18	-454.54	-63%		0.4
RITONAVIR,LOPINAVIR	50MG,200MG	385.74	298.85	890	574.91	-189.17	-33%		0.7
EFAVIRENZ	600MG	135.58	47.74	90	91.84	43.74	48%	NAD 3,936.98	1.5
EFAVIRENZ	600MG	115.24	47.74		91.84	23.40	25%	NAD 0.00	1.3
ZIDOVUDINE(AZT)	100MG	170.99		129	0.00				
LAMIVUDINE(3TC)	10MG/ML	84.67	74.98	12	144.24	-59.57	-41%		0.6
ABACAVIRSLPHATE	20MG/ML	673.91	96.06	4	184.80	489.12	265%	NAD 1,956.46	3.6
OMEGA-3TRIGLYCERIDES,ANTIOXIDANTS,ZIDOVUDINE(AZT)	855MG,15MG,300MG	237.72		93	0.00				
NEVIRAPINE		254.89	147.08	49	282.95	-28.05	-10%	(NAD 1,374.51)	0.9
ATAZANAVIR		236.64			0.00				
EFAVIRENZ	50MG	49.64		245	0.00				
ATAZANAVIRSLPHATE	200MG	420.98	751.45	64	1,445.60	-1,024.62	-71%		0.3
LAMIVUDINE(3TC),ABACAVIRSLPHATE	300MG,600MG	366.28		464	0.00				
EFAVIRENZ	200MG	240.16	198.99		382.81	-142.65	-37%	NAD 0.00	0.6
TENOFOVIRDISOPROXIL(fumarate)	300MG	264.82	41.03	233	78.93	185.89	236%	NAD 43,311.49	3.4
RITONAVIR	100MG	76.72	116.74	467	224.58	-147.86	-66%		0.3
LAMIVUDINE(3TC)	10MG/ML	46.26	74.98	164	144.24	-97.98	-68%		0.3
STAVUDINE		29.54	49.28	42	94.80	-65.26	-69%		0.3
STAVUDINE(STV)	20MG	50.69	44.08	24	84.80	-34.11	-40%		0.6
ZIDOVUDINE(AZT)	250MG	314.45	60.86	11	117.08	197.37	169%	NAD 2,171.09	2.7
ATAZANAVIRSLPHATE	300MG	304.80		49	0.00				
NEVIRAPINE,LAMIVUDINE(3TC),NEVIRAPINE	50MG,30MG,200MG	1048.18	116.77	62	224.64	823.54	367%	NAD 51,059.69	4.7
OMEGA-3TRIGLYCERIDES,ANTIOXIDANTS,ZIDOVUDINE(AZT)	855MG,15MG,300MG	461.67		69	0.00				
ATAZANAVIRSLPHATE	200MG	565.66		92	0.00				
NEVIRAPINE	200MG	170.84	116.77	158	224.64	-53.80	-24%		0.8
LAMIVUDINE(3TC)		107.26		1	0.00				
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIRDISOPROXIL(fumarate)	50MG,30MG,300MG	879.56		51	0.00				
ATAZANAVIRSLPHATE	150MG	488.09			0.00				
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	244.70	78.70	134	151.40	93.30	62%	NAD 12,502.79	1.6

					POTENTIAL COST SAVING 2019					
Active Ingredients	Ingredients Dosage	PSEMAS 2019 Unit Price (NAD)	MOHSS 2019 Unit Price (NAD)	PSEMAS Quantity 2018/19	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff ( P -C)(NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS	
ABACA VIRSULPHATE	20MG/ML	264.44	96.06	135	184.80	79.65		43%	NAD 10,752.52	1.4
RITONAVIR,ATAZANAVIR SLPHATE	100MG,300MG	452.22	195.41	1,031	375.92	76.30		20%	NAD 78,669.48	1.2
NEVIRAPINE	200MG	189.42	116.77	39	224.64	-35.21		-16%		0.8
ABACA VIRSULPHATE	20MG/ML	647.16	96.06	100	184.80	462.37		250%	NAD 46,236.51	3.5
RILPIVIRINE	25MG	41.14		35	0.00					
LAMIVUDINE		59.92	33.51	24	64.46	-4.55		-7%	(NAD 109,14)	0.9
LAMIVUDINE		88.14	33.51		64.46	23.67		37%	NAD 0.00	1.4
TENOFOVIRDISOPROXIL		225.70	41.03	99	78.93	146.77		186%	NAD 14,529.74	2.9
DARUNAVIR	600MG	832.29	1009.85	17	1,942.70	-1,110.41		-57%		0.4
LOPINAVIR		79.92		16	0.00					
LAMIVUDINE(3TC)	10MG/ML	86.03	74.98	13	144.24	-58.22		-40%		0.6
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	336.06	78.63	5	151.26	184.79		122%	NAD 923.95	2.2
ETRAVIRINE		1166.75			0.00					
DARUNAVIR		943.86			0.00					
ZIDOVUDINE(AZT)	50MG/5ML	400.60	299.99		577.11	-176.51		-31%	NAD 0.00	0.7
NEVIRAPINE		221.07	116.77		224.64	-3.57		-2%	NAD 0.00	1.0
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	429.83	78.63	15	151.26	278.57		184%	NAD 4,178.49	2.8
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	30MG,60MG	253.54			0.00					
ABACA VIRSULPHATE	300MG	575.39	129.83	11	249.76	325.62		130%	NAD 3,581.87	2.3
RITONAVIR,LOPINAVIR	25MG,100MG	120.23	117.42	2	225.89	-105.65		-47%		0.5
ZIDOVUDINE(AZT)	300MG	150.00	97.09		186.78	-36.78		-20%	NAD 0.00	0.8
EMTRICITABINE,EFAVIRENZ,TENOFOVIRDISOPROXIL(fumarate)	200MG,600MG,300MG	456.48	83.28	3	160.21	296.27		185%	NAD 888.80	2.8
NEVIRAPINE,LAMIVUDINE(3TC),TENOFOVIRDISOPROXIL(fumarate)	200MG,150MG,300MG	711.44	116.77	167	224.64	486.81		217%	NAD 81,296.47	3.2
EFAVIRENZ	200MG	87.04	199.00	6	382.83	-295.79		-77%		0.2
NEVIRAPINE	10MG/ML	185.23	147.11	4	283.00	-97.77		-35%		0.7
ATAZANAVIR		441.26			0.00					
EFAVIRENZ	600MG	147.85	47.74		91.84	56.01		61%	NAD 0.00	1.6
ATAZANAVIR SLPHATE	300MG	447.35		29	0.00					
RALTEGRAVIR	100MG	447.68	444.30	3	854.72	-407.04		-48%		0.5
EFAVIRENZ	600MG	125.78	47.74		91.84	33.94		37%	NAD 0.00	1.4
ZIDOVUDINE		202.47			0.00					
TENOFOVIRDISOPROXIL(fumarate)	300MG	177.07	41.03	483	78.93	98.14		124%	NAD 47,401.06	2.2
EFAVIRENZ	600MG	135.71	47.74	1	91.84	43.87		48%	NAD 43.87	1.5
RITONAVIR	80MG/ML	87.60			0.00					
ZIDOVUDINE		183.99			0.00					
TENOFOVIRDISOPROXIL		115.30	41.03	22	78.93	36.37		46%	NAD 800.12	1.5
NEVIRAPINE	200MG	192.68	35.37	4	68.04	124.64		183%	NAD 498.55	2.8
ATAZANAVIR SLPHATE	150MG	368.27			0.00					
TENOFOVIRDISOPROXIL(fumarate)	300MG	212.27	41.03	16	78.93	133.34		169%	NAD 2,133.39	2.7
ZIDOVUDINE(AZT)		199.18		6	0.00					
RITONAVIR,LOPINAVIR	50MG,200MG	471.79	298.84		574.89	-103.10		-18%	NAD 0.00	0.8
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	603.65	78.63		151.26	452.39		299%	NAD 0.00	4.0
LAMIVUDINE(3TC),EFAVIRENZ,VITAMIND3(CHOLECALCIFEROL)	300MG,400MG,400U (1	795.04	92.64	4,135	178.21	616.83		346%	NAD 2,550,595.20	4.5
EFAVIRENZ	600MG	144.70	47.74	522	91.84	52.86		58%	NAD 27,592.99	1.6
MINERALS,ANTI OXIDANTS,TENOFOVIRDISOPROXIL(fumarate)	300MG	43.92	41.03	297	78.93	-35.01		-44%		0.6
ABACA VIRSULPHATE	300MG	486.16	129.83	217	249.76	236.40		95%	NAD 51,298.41	1.9

					POTENTIAL COST SAVING 2019				
Active ingredients	Ingredients Dosage	PSEMAS 2019 Unit Price (NAD)	MOHSS 2019 Unit Price (NAD)	PSEMAS Quantity 2018/19	MoHSS price + 50% mark-up + 12.5% distribution/Logistics fee + 14% VAT	Price Diff ( P -C)(NAD)	% Diff of MOHSS price to PSEMAS price	Potential Cost saving ( NAD)	Ratio MoHSS/PSEMAS
TENOFOVIRDISOPROXIL(fumarate)	300MG	148.73	41.03	210	78.93	69.80	88%	NAD 14,658.65	1.9
LAMIVUDINE(3TC)	10MG/ML	136.46	74.98	75	144.24	-7.78	-5%	(NAD 583.80)	0.9
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	236.37	78.70	59	151.40	84.97	56%	NAD 5,013.25	1.6
NEVIRAPINE		95.07	116.77	39	224.64	-129.57	-58%		0.4
NEVIRAPINE		177.64	147.11	36	283.00	-105.37	-37%		0.6
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE		294.33	78.63	35	151.26	143.06	95%	NAD 5,007.24	1.9
NEVIRAPINE	200MG	186.13	116.77	19	224.64	-38.51	-17%		0.8
ZIDOVUDINE(AZT)	50MG/5ML	289.57	24.68	17	47.48	242.10	510%	NAD 4,115.63	6.1
TENOFOVIRDISOPROXIL		101.62	41.03	14	78.93	22.69	29%	NAD 317.70	1.3
TENOFOVIRDISOPROXIL(fumarate)	300MG	89.20	41.03	13	78.93	10.26	13%	NAD 133.44	1.1
FERROUSSULPHATE,ASCORBICACID(VITAMINC),ATAZANAVIRSLPHAT	150MG,40MG,200MG	64.33		11	0.00				
EFAVIRENZ	600MG	168.71	47.74	6	91.84	76.87	84%	NAD 461.22	1.8
TENOFOVIRDISOPROXIL(fumarate)	300MG	167.25	41.03	5	78.93	88.32	112%	NAD 441.59	2.1
DARUNAVIR	300MG	453.23		4	0.00				
RALTEGRAVIR	25MG	168.49		4	0.00				
COPPER,ASCORBICACID(VITAMINC),TENOFOVIRDISOPROXIL(fumara	300MG	90.49	41.03	2	78.93	11.56	15%	NAD 23.12	1.1
LAMIVUDINE(3TC),ABACAVIRSULPHATE	300MG,600MG	594.46		2	0.00				
LAMIVUDINE(3TC)	150MG	89.36	33.51	1	64.46	24.90	39%	NAD 24.90	1.4
LOPINAVIR,RITONAVIR		681.38	117.42	1	225.89	455.49	202%	NAD 455.49	3.0
TENOFOVIRDISOPROXILFU MARATE		176.30	41.03	1	78.93	97.37	123%	NAD 97.37	2.2
EFAVIRENZ	600MG	120.64	47.74		91.84	28.80	31%	NAD 0.00	1.3
NEVIRAPINE	200MG	167.50	116.77		224.64	-57.14	-25%	NAD 0.00	0.7
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	201.45	78.70		151.40	50.05	33%	NAD 0.00	1.3
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	251.57	78.70		151.40	100.17	66%	NAD 0.00	1.7
DIDANOSINE		126.03	416.89		801.99	-675.96	-84%	NAD 0.00	0.2
ATAZANAVIRSULPHATE	200MG	347.55			0.00				
DIDANOSINE		164.76	416.89		801.99	-637.23	-79%	NAD 0.00	0.2
DIDANOSINE		194.55	416.89		801.99	-607.44	-76%	NAD 0.00	0.2
ATAZANAVIRSULPHATE	150MG	215.64			0.00				
DIDANOSINE		172.70	416.89		801.99	-629.29	-78%	NAD 0.00	0.2
ATAZANAVIR		128.17			0.00				
TENOFOVIRDISOPROXIL(fumarate),EMTRICITABINE	300MG,200MG	239.83	78.63		151.26	88.57	59%	NAD 0.00	1.6
LAMIVUDINE		77.58	74.98		144.24	-66.66	-46%	NAD 0.00	0.5
EFAVIRENZ	200MG	132.57	198.99		382.81	-250.24	-65%	NAD 0.00	0.3
OMEGA6,MULTIVITAMINS,ZIDOVUDINE(AZT)	250MG	308.98	60.86		117.08	191.90	164%	NAD 0.00	2.6
TENOFOVIRDISOPROXIL(fumarate)	300MG	105.95	41.03		78.93	27.02	34%	NAD 0.00	1.3
EFAVIRENZ	600MG	90.41	47.74		91.84	-1.43	-2%	NAD 0.00	1.0
STAVUDINE		31.84	44.08		84.80	-52.95	-62%	NAD 0.00	0.4
EFAVIRENZ	200MG	179.69	198.99		382.81	-203.12	-53%	NAD 0.00	0.5
LAMIVUDINE		56.44			0.00				
RALTEGRAVIR		731.05	1200.54		2,309.54	-1,578.49	-68%	NAD 0.00	0.3
ZIDOVUDINE(AZT),LAMIVUDINE(3TC)	300MG,150MG	165.13	78.70		151.40	13.73	9%	NAD 0.00	1.1
ATAZANAVIRSULPHATE	200MG	281.75	751.45		1,445.60	-1,163.85	-81%	NAD 0.00	0.2
NEVIRAPINE,LAMIVUDINE(3TC),LAMIVUDINE(3TC)	200MG,150MG,150MG	365.67	116.77		224.64	141.03	63%	NAD 0.00	1.6
TENOFOVIRDISOPROXIL(fumarate),LAMIVUDINE(3TC)	300MG,300MG	261.03	49.47		95.17	165.86	174%	NAD 0.00	2.7
					<b>220.76</b>	<b>-15.08</b>		<b>NAD 40,676,370.37</b>	<b>1.49</b>

## Annex 3: Interview Guides for evaluation



Evaluation of pilot project on the implementation of models to distribute centrally procured ARV medicines to PSEMAS beneficiaries through the private sector

Protocol for Key Informant Interviews with health system stakeholders to evaluate the success of the pilot project

Interview guide for MoHSS representatives

This document will serve as a guide for interviews with stakeholders involved or affected by the implementation of the pilot model to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector.

Before starting the interview, note the characteristics of the interviewee and the date/time of interview below.

a. Name _____	e. Date ___/___/___
b. Organization _____	f. Time _____
b. Role/Title _____	

### Introduction and Informed Consent

The Ministry of Health and Social Services, in collaboration with the Ministry of Finance and the Public Service Employees Medical Aid Scheme (PSEMAS), has implemented a pilot project of distributing centrally procured ARVs to PSEMAS beneficiaries through the private sector with the aim of realising cost savings for PSEMAS and its beneficiaries. In order to better strengthen the public private partnership on the procurement and distribution of pharmaceuticals and other health products, it is important to gain a better understanding of the effectiveness of our approach and, with your advice, to determine if changes to our approach are deemed necessary. The goal of this evaluation is to determine how the pilot project has impacted the Namibian health system in

terms of the extent cost savings realised, improvements in public-private cooperation and improved efficiencies.

Please be aware that participation in this evaluation is completely voluntary. If you decide to participate, you may stop participating at any time and you may decide not to answer any specific question. The evaluation team will maintain the strict confidentiality of the data collected as well as ensuring the anonymity of all participants.

Do we have your verbal consent to ask our questions: Yes  No

To ensure the comprehensibility of the data collected, the research team would like to record the interview. Please be advised that only the research team will listen to the recording which will be stored in a secure platform and destroyed once analysed.

Do we have your verbal consent to record this interview: Yes  No

If you have questions regarding the study or your rights as a participant, please do not hesitate to contact the Research Team Lead, <Enter Name> and <email address>.

Theme	Questions
Design	<p>To start off, I would like to hear a bit about your opinion on the design of the model. The aim is to determine whether the design of the pilot model was appropriate and effective.</p> <ul style="list-style-type: none"> <li>- Was the design of the pilot model based on needs assessment and a contextual analysis?</li> <li>- Was the design the most appropriate to meet the identified needs of cost saving?</li> <li>- If any, what you would change or recommend for the design?</li> </ul>
Relevance	<p>Next, I would like to talk to you about the relevance of the pilot model within the Namibian context. The purpose of the questions is to determine the extent which the objectives of the pilot model were continuously consistent with the MoHSS needs, mandate and overarching strategies and policies.</p> <ul style="list-style-type: none"> <li>- How relevant is the model to the Government (MoHSS) needs and priorities?</li> <li>- How relevant is the model to other key stakeholders' (pharmaceuticals manufacturers and private sector) needs and priorities?</li> </ul>

	<ul style="list-style-type: none"> <li>- To what extent is the model aligned with the policies and strategies of the country?</li> </ul>
Efficiency	<p>One of the main aims of the pilot model was to allow PSEMAS to achieve greater efficiencies, which is a measure of how resources/inputs are converted into outputs. I would like to get your perspective on the efficiency of the pilot model.</p> <ul style="list-style-type: none"> <li>- Were the planned objectives and outcomes in the model document achieved?</li> <li>- What are the results achieved beyond the log frame?</li> <li>- What savings were realized over the pilot timeframe?</li> </ul>
Partnerships and cooperation	<p>With the following questions, I would like to assess the level and quality of MoHSS cooperation with implementing partners (e.g., Private Sector (Pharmaceutical), other Government agencies (MoF)). The focus will be on the extent to which partnerships have been sought and established, and synergies been created in the delivery of assistance, the extent to which there was effective coordination among partners, the extent to which partnerships' responsibilities were fully and effectively discharged and the extent to which partnerships' inputs were of quality and provided in a timely manner.</p> <ul style="list-style-type: none"> <li>- To what extent have partnerships been sought and established and synergies been created in the delivery of assistance?</li> <li>- Did the government communicate what was expected of partners during the pilot?</li> <li>- How did you manage partners coordination during the pilot?</li> <li>- Did the partners discharge their responsibilities effectively?</li> <li>- Were their inputs of quality and provided in a timely manner?</li> </ul>
Effectiveness	<p>Now I would like to shift to talking about the effectiveness of the pilot model, meaning the extent to which the model achieved its objectives and outcomes.</p> <ul style="list-style-type: none"> <li>- What impact did it have on lead times (between ordering &amp; delivery at the provider)?</li> <li>- Were there any stock outs?</li> <li>- What challenges did the providers and distributors experience in accessing the medicines through CMS?</li> <li>- Were there any complaints from patients?</li> </ul>
Impact	<p>Another aspect we would like to evaluate is the impact of the model. Impact is defined as the positive and negative, primary and secondary long-term <i>economic, environmental, social</i> change(s) produced or <i>likely</i> to be produced by the model, directly or indirectly, intended or unintended, after the model was implemented. The following questions are aimed at understanding your perspectives on the impact of the pilot model.</p> <ul style="list-style-type: none"> <li>- What long-term social, economic, technical, environmental changes for individuals, communities, and institutions has the model contributed or is likely to contribute to?</li> </ul>
Sustainability	<p>Finally, I would like to talk to you about the sustainability of the pilot project. In this context, sustainability is concerned with measuring whether</p>

the benefits of the model are likely to continue after its termination. Model needs to be socially endorsed as well as financially sustainable

- To what extent is the model results (impact if any, and outcomes) likely to continue after the pilot ended?
- Is stakeholders' engagement likely to continue, be scaled up, replicated, or institutionalized after external funding ceases?





## AFRICAN COLLABORATIVE FOR HEALTH FINANCING SOLUTIONS

Evaluation of pilot project on the implementation of models to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector

Protocol for Key Informant Interviews with health system stakeholders to evaluate the success of the pilot project

### Interview guide for PSEMAS representatives

This document will serve as a guide for interviews with stakeholders involved or affected by the implementation of the pilot model to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector.

Before starting the interview, note the characteristics of the interviewee and the date/time of interview below.

a. Name _____	e. Date ___/___/___
b. Organization _____	f. Time _____
b. Role/Title _____	

#### Introduction and Informed Consent

The Ministry of Health and Social Services, in collaboration with the Ministry of Finance and the Public Service Employees Medical Aid Scheme (PSEMAS), has implemented a pilot project of distributing centrally procured ARVs to PSEMAS beneficiaries through the private sector with the aim of realising cost savings for PSEMAS and its beneficiaries. In order to better strengthen the public private partnership on the procurement and distribution of pharmaceuticals and other health products, it is important to gain a better understanding of the effectiveness of our approach and, with your advice, to determine if changes to our approach are deemed necessary. The goal of this evaluation is to determine how the pilot project has impacted the Namibian health system in terms of the extent cost savings realised, improvements in public-private cooperation and improved efficiencies.

Please be aware that participation in this evaluation is completely voluntary. If you decide to participate, you may stop participating at any time and you may decide not to answer any specific question. The evaluation team will maintain the strict confidentiality of the data collected as well as ensuring the anonymity of all participants.

Do we have your verbal consent to ask our questions: Yes   No

To ensure the comprehensibility of the data collected, the research team would like to record the interview. Please be advised that only the research team will listen to the recording which will be stored in a secure platform and destroyed once analysed.

Do we have your verbal consent to record this interview: Yes   No

If you have questions regarding the study or your rights as a participant, please do not hesitate to contact the Research Team Lead, <Enter Name> and <email address>.

Theme	Questions
Design	<p>To start off, I would like to hear a bit about your opinion on the design of the model. The aim is to determine whether the design of the pilot model was appropriate and effective.</p> <ul style="list-style-type: none"> <li>- Was the design of the pilot model based on needs assessment and a contextual analysis?</li> <li>- Was the design the most appropriate to meet the identified needs of cost saving?</li> <li>- If any, what you would change or recommend for the design?</li> </ul>
Relevance	<p>Next, I would like to talk to you about the relevance of the pilot model within the Namibian context. The purpose of the questions is to determine the extent which the objectives of the pilot model were continuously consistent with the MoHSS needs, mandate and overarching strategies and policies.</p> <ul style="list-style-type: none"> <li>- How relevant is the model to PSEMAS needs and priorities?</li> <li>- How relevant is the model to other key stakeholders' (pharmaceuticals and private sector) needs and priorities?</li> <li>- To what extent is the model aligned with the policies and strategies of the country, and bilateral donors?</li> </ul>

Efficiency	<p>One of the main aims of the pilot model was to allow PSEMAS to achieve greater efficiencies, which is a measure of how resources/inputs are converted into outputs. I would like to get your perspective on the efficiency of the pilot model.</p> <ul style="list-style-type: none"> <li>- Were the planned objectives and outcomes in the model document achieved?</li> <li>- What are the results achieved beyond the log frame?</li> <li>- What savings were realized over the pilot timeframe?</li> </ul>
Partnerships and cooperation	<p>With the following questions, I would like to assess the level and quality of MoHSS cooperation with implementing partners (e.g., Private Sector (Pharmaceutical), NGOs, other Government agencies (MoF)). The focus will be on the extent to which partnerships have been sought and established, and synergies been created in the delivery of assistance, the extent to which there was effective coordination among partners, the extent to which partnerships' responsibilities were fully and effectively discharged and the extent to which partnerships' inputs were of quality and provided in a timely manner.</p> <ul style="list-style-type: none"> <li>- To what extent have partnerships been sought and established and synergies been created in the delivery of assistance?</li> <li>- Did the government communicate what was expected of partners during the pilot?</li> <li>- How did you coordinate with other partners?</li> </ul>
Effectiveness	<p>Now I would like to shift to talking about the effectiveness of the pilot model, meaning the extent to which the model achieved its objectives and outcomes.</p> <ul style="list-style-type: none"> <li>- Were the costing system in place and understood (admin fees etc.)?</li> <li>- What impact did it have on lead times (between ordering &amp; delivery at the provider)?</li> <li>- Were there any stock outs?</li> <li>- What challenges did the providers and distributors experience in accessing the medicines through CMS?</li> <li>- Was there any significant cost savings from the model?</li> <li>- Were there any complaints from patients?</li> </ul>
Impact	<p>Another aspect we would like to evaluate is the impact of the model. Impact is defined as the positive and negative, primary and secondary long-term <i>economic, environmental, social</i> change(s) produced or <i>likely</i> to be produced by the model, directly or indirectly, intended or unintended, after the model was implemented. The following questions are aimed at understanding your perspectives on the impact of the pilot model.</p> <ul style="list-style-type: none"> <li>- What long-term social, economic, technical, environmental changes for individuals, communities, and institutions has the model contributed or is likely to contribute to?</li> <li>- Are PSEMAS patients paying less money for their medication? <ul style="list-style-type: none"> <li>o What gains did PSEMAS make?</li> <li>o What were the specific features of the model that made a difference?</li> <li>o What difference has the model made to the beneficiaries?</li> <li>o What were the non-financial benefits of the model?</li> </ul> </li> </ul>

Sustainability	<p>Finally, I would like to talk to you about the sustainability of the pilot project. In this context, sustainability is concerned with measuring whether the benefits of the model are likely to continue after its termination. Model needs to be social as well as financially sustainable</p> <ul style="list-style-type: none"><li>- To what extent is the model results (impact if any, and outcomes) likely to continue after the pilot ended?</li><li>- Is your engagement likely to continue, be scaled up, replicated, or institutionalized after external funding ceases?</li></ul>
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## AFRICAN COLLABORATIVE FOR HEALTH FINANCING SOLUTIONS

### Evaluation of pilot project on the implementation of models to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector

#### Protocol for Key Informant Interviews with health system stakeholders to evaluate the success of the pilot project

##### Interview guide for CMS representatives

This document will serve as a guide for interviews with stakeholders involved or affected by the implementation of the pilot model to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector.

Before starting the interview, note the characteristics of the interviewee and the date/time of interview below.

a. Name _____	e. Date ___/___/___
b. Organization _____	f. Time _____
b. Role/Title _____	

#### Introduction and Informed Consent

The Ministry of Health and Social Services, in collaboration with the Ministry of Finance and the Public Service Employees Medical Aid Scheme (PSEMAS), has implemented a pilot project of distributing centrally procured ARVs to PSEMAS beneficiaries through the private sector with the aim of realising cost savings for PSEMAS and its beneficiaries. In order to better strengthen the public private partnership on the procurement and distribution of pharmaceuticals and other health products, it is important to gain a better understanding of the effectiveness of our approach and, with your advice, to determine if changes to our approach are deemed necessary. The goal of this evaluation is to determine how the pilot project has impacted the Namibian health system in terms of the extent cost savings realised, improvements in public-private cooperation and improved efficiencies.

Please be aware that participation in this evaluation is completely voluntary. If you decide to participate, you may stop participating at any time and you may decide not to answer any specific question. The evaluation team will maintain the strict confidentiality of the data collected as well as ensuring the anonymity of all participants.

Do we have your verbal consent to ask our questions: Yes   No

To ensure the comprehensibility of the data collected, the research team would like to record the interview. Please be advised that only the research team will listen to the recording which will be stored in a secure platform and destroyed once analysed.

Do we have your verbal consent to record this interview: Yes   No

If you have questions regarding the study or your rights as a participant, please do not hesitate to contact the Research Team Lead, <Enter Name> and <email address>.

Theme	Questions
Design	<p>To start off, I would like to hear a bit about your opinion on the design of the model. The aim is to determine whether the design of the pilot model was appropriate and effective.</p> <ul style="list-style-type: none"> <li>- Was the design of the pilot model based on needs assessment and a contextual analysis?</li> <li>- Was the design the most appropriate to meet the identified needs of cost saving?</li> <li>- If any, what you would change or recommend for the design?</li> </ul>
Relevance	<p>Next, I would like to talk to you about the relevance of the pilot model within the Namibian context. The purpose of the questions is to determine the extent which the objectives of the pilot model were continuously consistent with the MoHSS needs, mandate and overarching strategies and policies.</p> <ul style="list-style-type: none"> <li>- How relevant is the model to CMS needs and priorities?</li> <li>- How relevant is the model to other key stakeholders' (pharmaceuticals manufacturers/ distributors and private sector) needs and priorities?</li> </ul>

	<ul style="list-style-type: none"> <li>- To what extent is the model aligned with the policies and strategies of the country, and bilateral donors?</li> </ul>
Efficiency	<p>One of the main aims of the pilot model was to allow PSEMAS to achieve greater efficiencies, which is a measure of how resources/inputs are converted into outputs. I would like to get your perspective on the efficiency of the pilot model.</p> <ul style="list-style-type: none"> <li>- Were the planned objectives and outcomes in the model document achieved?</li> <li>- What are the results achieved beyond the log frame?</li> <li>- What savings were realized over the pilot timeframe?</li> </ul>
Partnerships and cooperation	<p>With the following questions, I would like to assess the level and quality of MoHSS cooperation with implementing partners (e.g., Private Sector (Pharmaceutical), NGOs, other Government agencies (MoF). The focus will be on the extent to which partnerships have been sought and established, and synergies been created in the delivery of assistance, the extent to which there was effective coordination among partners, the extent to which partnerships' responsibilities were fully and effectively discharged and the extent to which partnerships' inputs were of quality and provided in a timely manner</p> <ul style="list-style-type: none"> <li>- To what extent have partnerships been sought and established and synergies been created in the delivery of assistance?</li> <li>- Did the government communicate what was expected of partners during the pilot?</li> <li>- How did you coordinate with other partners?</li> <li>- Did the partners discharge their responsibilities effectively?</li> <li>- Were their inputs of quality and provided in a timely manner?</li> </ul>
Effectiveness	<p>Now I would like to shift to talking about the effectiveness of the pilot model, meaning the extent to which the model achieved its objectives and outcomes.</p> <ul style="list-style-type: none"> <li>- Were the costing system in place and understood (admin fees etc)</li> <li>- What impact did it have on lead times (between ordering &amp; delivery at the provider)?</li> <li>- Were there any stock outs?</li> <li>- What challenges did the providers and distributors experience in accessing the medicines through CMS?</li> <li>- Were there any complaints from patients?</li> </ul>
Impact	<p>Another aspect we would like to evaluate is the impact of the model. Impact is defined as the positive and negative, primary and secondary long-term <i>economic, environmental, social</i> change(s) produced or <i>likely</i> to be produced by the model, directly or indirectly, intended or unintended, after the model was implemented. The following questions are aimed at understanding your perspectives on the impact of the pilot model.</p>

	<ul style="list-style-type: none"> <li>- What long-term social, economic, technical, environmental changes for individuals, communities, and institutions has the model contributed or is likely to contribute to?</li> <li>- Are PSEMAS patients paying less money for their medication? <ul style="list-style-type: none"> <li>o What gains did PSEMAS make?</li> <li>o What were the specific features of the model that made a difference?</li> </ul> </li> <li>- What were the non-financial benefits of the model?</li> </ul>
Sustainability	<p>Finally, I would like to talk to you about the sustainability of the pilot project. In this context, sustainability is concerned with measuring whether the benefits of the model are likely to continue after its termination. Model needs to be social as well as financially sustainable</p> <ul style="list-style-type: none"> <li>- To what extent is the model results (impact if any, and outcomes) likely to continue after the pilot ended?</li> <li>- Is your engagement likely to continue, be scaled up, replicated, or institutionalized after external funding ceases?</li> </ul>





## AFRICAN COLLABORATIVE FOR HEALTH FINANCING SOLUTIONS

Evaluation of pilot project on the implementation of models to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector

Protocol for Key Informant Interviews with health system stakeholders to evaluate the success of the pilot project

### Interview guide for PSEMAS beneficiary

This document will serve as a guide for interviews with stakeholders involved or affected by the implementation of the pilot model to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector.

Before starting the interview, note the characteristics of the interviewee and the date/time of interview below.

a. Name _____	e. Date ___/___/___
b. Organization _____	f. Time _____
b. Role/Title _____	

### Introduction and Informed Consent

The Ministry of Health and Social Services, in collaboration with the Ministry of Finance and the Public Service Employees Medical Aid Scheme (PSEMAS), has implemented a pilot project of distributing centrally procured ARVs to PSEMAS beneficiaries through the private sector with the aim of realising cost savings for PSEMAS and its beneficiaries. In order to better strengthen the public private partnership on the procurement and distribution of pharmaceuticals and other health products, it is important to gain a better understanding of the effectiveness of our approach and, with your advice, to determine if changes to our approach are deemed necessary. The goal of this evaluation is to determine how the pilot project has impacted the Namibian health system in terms of the extent cost savings realised, improvements in public-private cooperation and improved efficiencies.

Please be aware that participation in this evaluation is completely voluntary. If you decide to participate, you may stop participating at any time and you may decide not to answer any specific question. The evaluation team will maintain the strict confidentiality of the data collected as well as ensuring the anonymity of all participants.

Do we have your verbal consent to ask our questions: Yes   No

To ensure the comprehensibility of the data collected, the research team would like to record the interview. Please be advised that only the research team will listen to the recording which will be stored in a secure platform and destroyed once analysed.

Do we have your verbal consent to record this interview: Yes   No

If you have questions regarding the study or your rights as a participant, please do not hesitate to contact the Research Team Lead, <Enter Name> and <email address>.

Theme	Questions
Relevance	<p>Next, I would like to talk to you about the relevance of the pilot model within the Namibian context. The purpose of the questions is to determine the extent which the objectives of the pilot model were continuously consistent with the MoHSS needs, mandate and overarching strategies and policies.</p> <ul style="list-style-type: none"><li>- How relevant is the model to your needs and priorities?</li><li>- How relevant is the model to other key stakeholders' (pharmaceuticals and private sector) needs and priorities?</li><li>- To what extent is the model aligned with the policies and strategies of the country, and bilateral donors?</li></ul>

Impact	<p>Another aspect we would like to evaluate is the impact of the model. Impact is defined as the positive and negative, primary and secondary long-term <i>economic, environmental, social</i> change(s) produced or <i>likely</i> to be produced by the model, directly or indirectly, intended or unintended, after the model was implemented. The following questions are aimed at understanding your perspectives on the impact of the pilot model.</p> <ul style="list-style-type: none"><li>- What long-term social, economic, technical, environmental changes for individuals, communities, and institutions has the model contributed or is likely to contribute to?</li><li>- Are you paying less money for medication?<ul style="list-style-type: none"><li>○ What gains did you make?</li><li>○ What were the specific features of the model that made a difference?</li><li>○ What difference has the model made to the beneficiaries?</li><li>○ What were the non-financial benefits of the model?</li></ul></li></ul>
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## AFRICAN COLLABORATIVE FOR HEALTH FINANCING SOLUTIONS

Evaluation of pilot project on the implementation of models to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector

Protocol for Key Informant Interviews with health system stakeholders to evaluate the success of the pilot project

Interview guide for Pharmaceutical society representatives

This document will serve as a guide for interviews with stakeholders involved or affected by the implementation of the pilot model to distribute centrally procured ARVs to PSEMAS beneficiaries through the private sector.

Before starting the interview, note the characteristics of the interviewee and the date/time of interview below.

a. Name _____	e. Date ___/___/___
b. Organization _____	f. Time _____
b. Role/Title _____	

### Introduction and Informed Consent

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Theme	Questions
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