Report to Congress by the U.S. Global AIDS Coordinator on the Use of Generic Drugs in the President's Emergency Plan for AIDS Relief

May 2008

The Administration provides this *Report* pursuant to Report 110-197 of the 2008 State, Foreign Operations, and Related Programs Appropriations Bill, 2008, H.R. 2764: "The Committee directs the Coordinator to provide…a report on the use of generic drugs in the focus and non-focus countries… The report should provide specific information about first-line, second-line and pediatric formulations purchased by the GHAI by country, including a list of medications (generic and name brand) purchased, the unit price, the total cost by medication, their manufacturer and the per patient annual cost. The report should include a list of the regimens (generic and name brand) currently supported by PEPFAR and a comparison of these regimens to the nationally approved regimens in the focus countries for comparison purposes. The report should also include information by country about the current state of regulatory systems in the focus and non-focus countries and the steps that the GHAI will take in FY 08 to strengthen these systems."

INTRODUCTION

Since its inception in 2003, the U.S. President's Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) has supported an international scale-up of comprehensive HIV prevention, treatment, and care that is unparalleled in size and scope. Through innovative partnerships with committed host Governments and implementing partners, PEPFAR has leveraged its funding to achieve impressive outcomes.

The rapid scale-up of antiretroviral treatment represents one of the most significant results of these partnerships. In 2003, an estimated 50,000 persons in Sub-Saharan Africa were receiving antiretroviral treatment (ART). Since that time, PEPFAR-funded ART programs for HIV-infected individuals have supported life-saving treatment for 1.45 million people through September 2007, including more than 1.3 million in Sub-Saharan Africa. This massive increase in the availability of ART has led to greater rates of national coverage for those in need than were even thought possible several years ago (Table 1). For instance, in Botswana, ART coverage has increased six-fold, from 15.2 percent in 2003 to 90 percent in 2007, and the mean coverage rate in the focus countries has increased from 1.9 percent to 37 percent over the same period.

Table 1. National Treatment Coverage

National Treatment Coverage Supported by All Sources			
Country	**Percentage Coverage 2003[1]**	**Percentage Coverage 2007[2]**	**Percentage Change in Coverage (2003-2007)**
Botswana	15.2%	90%	494%
Cote d'Ivoire	4.1%	30%	634%
Ethiopia	1.0%	45%	4514%
Guyana	12.6%	79%	526%
Haiti	2.9%	31%	966%
Kenya	1.5%	58%	3663%
Mozambique	1.0%	21%	2140%
Namibia	1.3%	75%	5713%
Nigeria	2.3%	22%	858%
Rwanda	4.4%	92%	1960%
South Africa	0.2%	31%	15560%
Tanzania	0.1%	34%	26616%
Uganda	6.5%	45%	593%
Vietnam	14.0%	25%	75%
Zambia	0.6%	51%	7965%
Total	**1.9%**	**37%**	**1881%**

Note:

National treatment coverage includes individuals on treatment as reported by the World Health Organization (WHO) and other multi-lateral agencies and includes all sources of support.

Footnotes:

[1]"Coverage of selected services for HIV/AIDS prevention, care and support in low and middle income countries in 2003," the U.S. Agency for International Development, the United Nations Joint Programme on HIV/AIDS (UNAIDS), the WHO, the U.S.

[2]Coverage rates were calculated by dividing PEPFAR program (upstream and downstream) results by the estimated number of people eligible for treatment in 2007. Estimated number of people eligible for treatment was determined using Spectrum 2.42 and country supplied data used by UNAIDS in he Report on the Global AIDS Epidemic (2006).

A critical component of expanding access to care and treatment services has been PEPFAR's commitment to supplying antiretroviral drugs (ARVs) and other essential medicines. The innovative U.S. Department of Health and Human Services/U.S. Food and Drug Administration (HHS/FDA) tentative approval mechanism for ARVs has allowed PEPFAR to stretch its funding and procure a far greater quantity of ARVs at lower prices, by allowing PEPFAR partners to purchase generic drugs. In addition, PEPFAR is pooling procurement through the Supply-Chain Management System (SCMS) project and other partners that negotiate better prices on bulk purchases of ARV drugs. Table 2 provides data on

PEPFAR support for ART and on funding the Emergency Plan has committed to the procurement of ARVs. The amount of funding committed to the procurement of ARVs has significantly increased since 2005, rising by more than 140 percent. Over the same period, the actual number of persons supported on ART by PEPFAR rose from 401,000 to 1,450,000, an increase of more than 235 percent. The greater rise in the number of persons on treatment compared with the increase in ART funding is due in large part to dramatically increased procurement of generic formulations made possible through the FDA tentative approval and reduced prices achieved through pooled procurement.

Table 2. Funding for ARV Treatment and Procurement

Funding for PEPFAR Anti-retroviral Treatment and ARV Procurement Funding: FY2005-2008 (Field & Central Direct Resources Only) in USD millions			
Program Area	**FY2005**	**FY2006**	**FY2007**
Total ART Support	**426.0**	**650.6**	**1,028.5**
ARV Drugs	157.5	283.5	402.1
ARV Services	268.5	367.1	626.3
ARV Drug Procurement as a Percentage of ART Programming	**37%**	**44%**	**39%**

Note: Information on PEPFAR focus countries, plus Zimbabwe.
Footnote: The "ARV Drugs" category includes funding for ARV drugs, as well as related Activities, including forecasting/quantification, product-selection, freight forwarding/importation, warehousing and distribution, capacity-building and technical assistance in commodity management.

U.S. Government Efforts to Increase the Quality and Uptake of Generic ARVs

In late 2005, only four PEPFAR focus country teams had begun to purchase HHS/FDA-approved generics. By the end of 2007, more than 90 percent of ARVs procured in 11 of the PEPFAR focus countries and Zimbabwe were generic. These impressive gains were the result of the U.S. Government uniting with an array of partners to overcome several challenging regulatory, drug-quality and supply-chain barriers, as detailed below.

Development of the HHS/FDA Tentative Approval Process

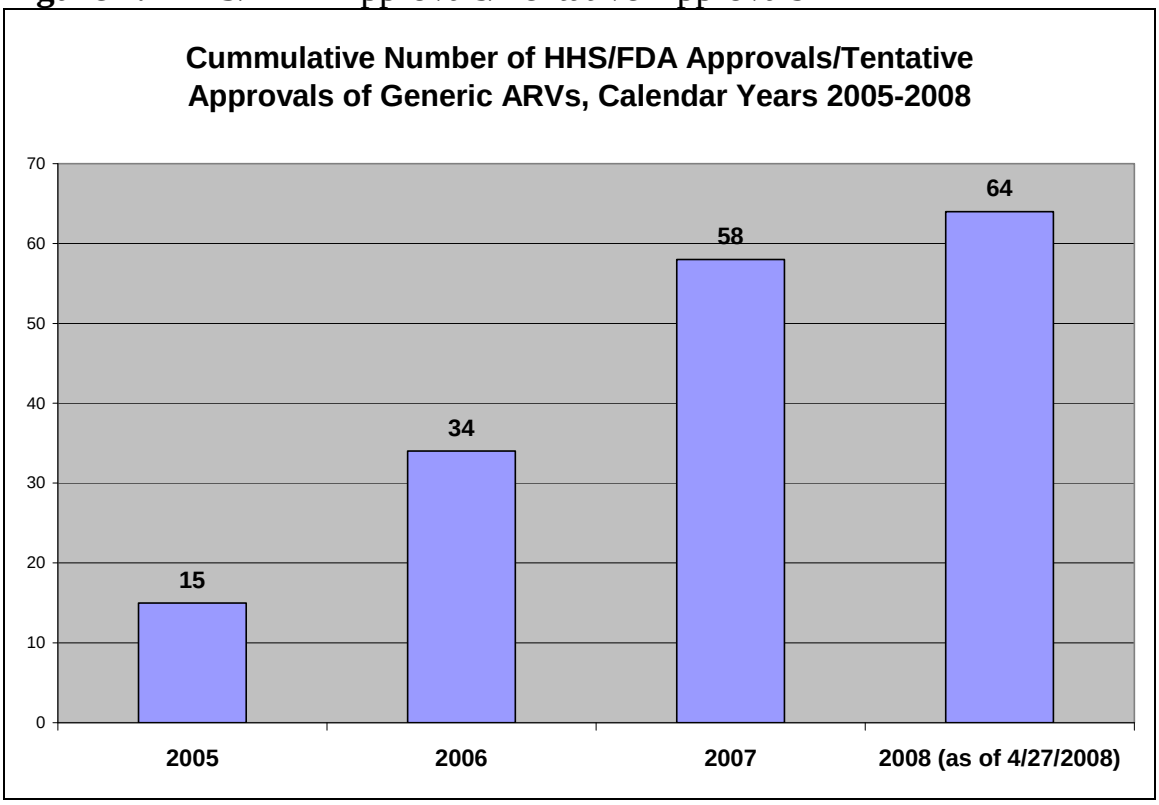
Since the inception of PEPFAR, the U.S. Government has stated its commitment to purchase the lowest-cost ARVs from any source, whether generic

or branded, as long as these drugs are proven safe, effective and of high quality, and their purchase is consistent with international trade law. To meet the need for ARVs proven to be safe, effective, and of high quality, HHS/FDA introduced an expedited review and inspection process in May 2004 whereby the agency could rapidly assess ARVs produced by any manufacturer in the world and, if approved or tentatively approved, make them eligible for purchase under PEPFAR. Tentative approval means that the product meets all of HHS/FDA's safety, efficacy, and manufacturing quality standards, but that patent or market exclusivity prevents HHS/FDA from issuing a full approval for marketing in the United States. Because the distinction is not significant for this report, the report uses the term "approved" to refer to drugs that have received either full or tentative approval.

Requiring ARVs approved through the expedited HHS/FDA process to meet standards equal to those established for drugs in the United States ensures ARV drugs purchased for use in PEPFAR programs abroad meet standards for those drugs available to U.S. patients. As a side benefit, the process developed for PEPFAR has also expedited availability in the U.S. market of some generic versions of ARVs for which patent protection has expired, such as zidovudine.

As of April 28, 2008, HHS/FDA has approved 64 generic ARV formulations under the expedited review, including eight fixed-dose combination products that contain two drugs in the same tablet or capsule, and four fixed-dose combination products that contain three drugs in the same tablet or capsule. These triple fixed-dose combinations are the most frequently used in developing countries, as they simplify treatment to one pill a day. Fourteen products are intended primarily for pediatric use. The steady increase in approvals is shown in Figure 1.

Figure 1. HHS/FDA Approvals/Tentative Approvals



Having more HHS/FDA-approved ARVs offers more flexibility for the Emergency Plan to finance the procurement of ARVs that are part of national treatment protocols. The U.S. Government respects the national treatment protocols and regimens that have been established by national Ministries of Health. PEPFAR technical experts and evidence-based recommendations from normative bodies such as the WHO Secretariat are often consulted by governments as they work to establish national treatment guidelines, but the ultimate responsibility and authority lies with national governments.

For the most updated approvals, HHS/FDA posts the full list at the following internet address: http://www.fda.gov/oia/pepfar.htm.

Development of Resources for Supply-Chain Management

In order to achieve a reliable supply of high-quality ARVs at the lowest possible prices, it is necessary to develop adequate infrastructure. Interruptions in treatment from stock-outs or treatment with drugs degraded by challenging environmental conditions can have disastrous effects for patients who are living

with HIV. The Emergency Plan, working closely with host Governments, pharmaceutical companies, and multilateral organizations, has developed a number of approaches to ensure widespread, reliable access to ARVs, including working with countries to streamline local regulatory conditions and developing the SCMS project. SCMS is implemented by a consortium of organizations tasked to provide pooled procurement and to build and support stronger supply-chain management for HIV-related products, while complementing existing processes.

SCMS is building capacity of national supply chains across PEPFAR focus countries in all elements of supply chain management, including forecasting and quantification, procurement, warehousing, and distribution and management information systems. Improvements in the supply chain of HIV/AIDS commodities help strengthen national health commodity supply chains overall and illustrate how Emergency Plan support can have a positive impact on entire health systems.

Increasing U.S. Government Regulatory Engagement with Host Governments

Once ARVs are found safe and effective by HHS/FDA, they are eligible for purchase by PEPFAR programs, but they must also be registered and reviewed by national drug regulatory authorities. This registration process may require additional marketing authorization, application, and review that can delay or prevent implementing partners from procuring certain ARVs. When ARVs approved by HHS/FDA are not registered for use in a given country, SCMS and other PEPFAR partners have often imported these drugs through the use of a country waiver, usually provided by the Ministry of Health. This means that ARVs that are not currently registered by the local regulatory authority can be brought in-country, and health-care providers can use them to treat patients. HHS/FDA is currently working with the WHO Secretariat and others to seek ways to expedite country registration.

In addition, since October 2005 HHS/FDA has held five forums in Rockville, Maryland for international drug-regulatory authorities, including regulatory officials from PEPFAR focus countries, to assist them in understanding the HHS/FDA expedited review process. The most recent forum occurred on April 14-18, 2008. The next forum is scheduled for October 6-10, 2008. In addition, HHS/FDA is developing a regional, in-country, drug-review training program to support the registration of ARVs approved by HHS/FDA. This program will

promote faster national registration so PEPFAR can procure and distribute more ARVs to patients in host countries.

PEPFAR also supports a number of other regulatory-strengthening initiatives across the 15 focus countries. For instance, HHS/FDA engages in outreach efforts to inform drug-regulatory officials about its expedited review process, and to keep them informed about the current list of approved ARVs. This collaboration improves mutual understanding of the regulatory processes and hastens the country registration process. HHS/FDA addressed a number of different types of technical assistance requests, including training and advisory services for post-marketing surveillance, pharmacovigilance, and capacity-building to strengthen host-country regulatory capacity.

Through this work with countries, PEPFAR has determined that standardizing importation requirements across regions would streamline processes for applicants, and ensure all health authorities consistently receive all important information needed for the responsible importation and reliable distribution of drug products. HHS/FDA has proposed a standardized process (the Pre-Approval Access Permit) for the importation of ARVs in sufficient quantities to address medical need while products await formal registration. The U.S. Government has also worked with multilateral partners to improve access to safe ARVs. For example, HHS/FDA has signed a confidentiality agreement with the WHO Pre-qualification Unit to hasten the inclusion on WHO's pre-qualification list of generic ARVs approved by HHS/FDA, and the WHO Secretariat has begun to add such ARVs to the drug list maintained by its pre-qualification project based solely on the HHS/FDA assessment. The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) now recognizes HHS/FDA approval as approval by a "stringent regulatory authority," which means Global Fund resources may go to purchase generic ARVs that have received HHS/FDA approval.

As part of its activities, the Emergency Plan has asked SCMS to provide technical assistance to U.S. Government and host country authorities to build capacity and to facilitate the review and approval process as appropriate. In Botswana, SCMS assisted the National Drug-Regulatory Unit to improve the local drug-registration system, including application guidance, reviewer templates, control of registration documentation and the storage of files. In Guyana, SCMS is assisting in developing the standard operating procedures to support an inspection program for drugs and premises, as well as training in their implementation. PEPFAR also supports an Inspection Resident Post in the Medical Materials Unit,

which is the receiving point for approximately 90 percent of the pharmaceutical products consumed in Guyana.

METHODOLOGY AND ANALYSIS: 2007 ARV SURVEY

This report details the procurement of antiretroviral drugs in the Emergency Plan's fifteen focus countries and Zimbabwe in Fiscal Year (FY) 2007.

Methodology

Based on the Committee's request for a report on the use of generic ARVs in FY 2007 and experiences garnered in responding to similar requests in past years, SCMS designed a survey instrument to obtain the required data. The creation of a spreadsheet form, complete with validation tables for respondents to use, facilitated the collection of data. The Office of the U.S. Global AIDS Coordinator conveyed information in the survey and its importance to U.S. Government country teams via the weekly PEPFAR newsletter to the field, and with a cover letter from the Principal Deputy Coordinator.

This year's survey requested two main categories of data:

1. "Delivered data," which reflects expenditures and volumes of ARV drugs purchased with PEPFAR funding and delivered to countries in FY 2007. PEPFAR has collected similar data in surveys during previous years.
2. "Purchased data" for the fourth quarter of FY 2007. PEPFAR has not previously requested these data, and they reflect ARVs ordered from July 1-September 30, 2007. The order data from the fourth quarter of FY 2007 provide a snapshot of the most recent activity with regard to PEPFAR resources committed for ARV drugs, whereas "delivered data" reflect prior purchasing trends.

PEPFAR requested the following information: purchaser, recipient organization, country, product, dosage strength, generic/branded, registered in country/waived, dosage packaging unit, quantity (of packaging units), packaging unit price in US$, total price in US$, INCO-TERMS (International Commercial Terms), vendor (if not manufacturer), manufacturer, country of origin, and date delivered.

In the field, each U.S. Government team has a designated point-of-contact for supply-chain issues; these staff facilitated data collection related to the survey.

The survey went to both U.S.- and field-based partners that procure ARVs. PEPFAR followed with more detailed correspondence as it received the responses, and offered technical assistance to compile the data. Responses accounted for $131.6 million of the total $283.5 million that PEPFAR funded in FY 2006 with the difference consisting of drugs delivered in the previous year as well as related technical assistance, forecasting, freight forwarding, importation costs, warehousing, etc.[1] (Because of the U.S. Government's funding cycle, the majority of procurements in FY 2007 took place with FY 2006 funding.) This report presents PEPFAR data for the 15 focus countries and Zimbabwe, as the Emergency Plan does not generally support ARV procurement in the other bilateral country programs.

PEPFAR migrated the assembled data into a database format, to facilitate analysis of the data. During this stage, PEPFAR cleaned the data; for example, typographical and numerical errors were corrected and blank fields were amended to be consistent with other provided data. Inconsistencies and other queries were discussed with the survey respondents, as necessary.

Analysis focused on the following characteristics by country: generic versus branded product, manufacturers, prices paid, and trends from FY 2005 to FY 2007. PEPFAR derived aggregated cost information for each of these characteristics and cross-tabulations of the data to respond to the Congressional request. In addition, the results of the survey were used to (1) estimate the "savings" achieved by the procurement of product from generic manufacturers, using the mean price for the actual procurements of ARVs from originator manufacturers, and (2) estimate the annual cost of treatment with generic and with branded products.

RESULTS

Generic Drugs and Diversification in Procurement

The Emergency Plan is a performance- and target-driven initiative. Every dollar saved can be used to support additional prevention, treatment, and care. To place more people on treatment, PEPFAR focuses on reducing the costs of delivering ART. One way to reduce these costs is to rationalize the procurement of

[1] The "Treatment: ARV Drugs" category includes funding for ARV drugs as well as activities related to forecasting/quantification, product selection, freight forwarding/importation, warehousing and distribution, capacity building and technical assistance.

ARVs, to take advantage of bulk-purchasing agreements and reduce waste through a more finely tuned system for delivering product to point-of-service end users. In almost every case, generic prices present an opportunity for cost savings; in some cases, the branded price per pack (e.g., a unit of drug such as a month's supply) of a drug is up to 11 times the cost of the approved generic version. These cost savings appear in the purchase of ARVs at the country level when comparing the amounts spent on generic drugs versus branded drugs.

Many of the FDA/HHS-approved generics appear in Appendix 1, especially nucleoside analogue reverse transcriptase inhibitors (NRTIs) used in first- and second-line regimens. However, medications generally reserved for second-line therapy, such as protease inhibitors, are only currently available for purchase from innovators at higher cost. Of note, prices per pack for comparable generic products were generally consistent across countries. Consistency of pricing and the lower prices of the generic products reflect the advantages of the bulk procurements enabled by SCMS and other large procurement mechanisms. Outliers in terms of per-pack prices appeared more among innovator products, and typically reflected small-volume procurements for limited numbers of patients.

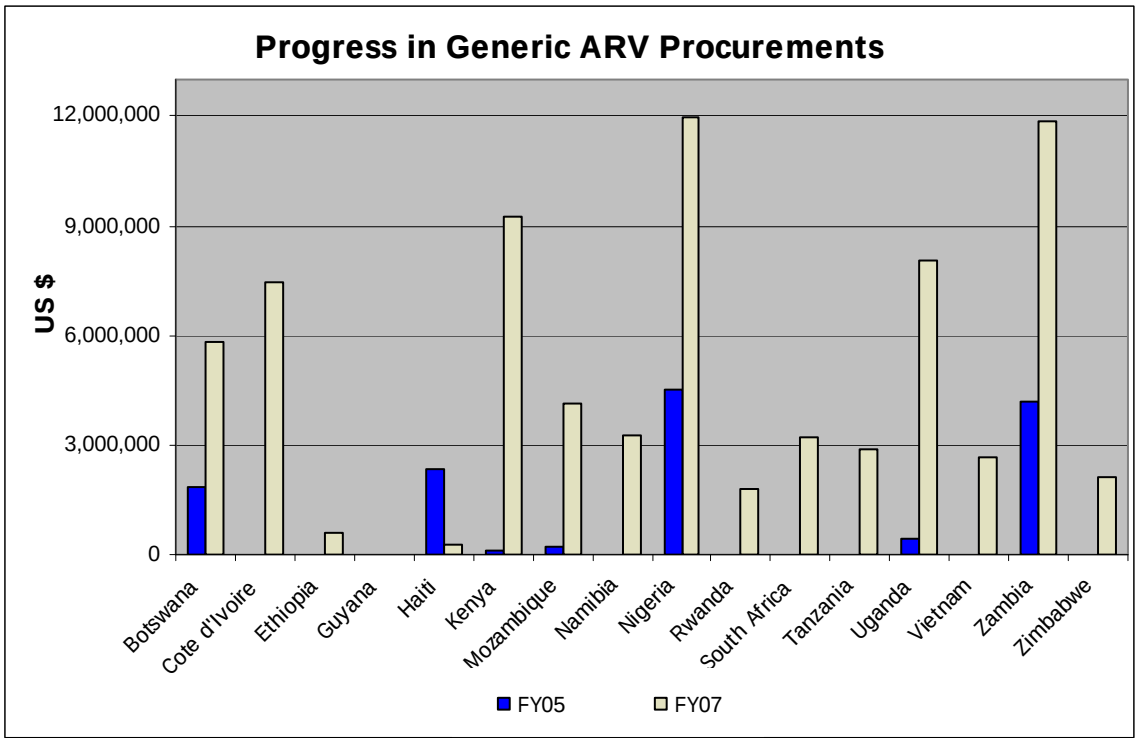
Appendix 1 also provides details on the quantities and costs of ARVs purchased by PEPFAR, by country, in FY 2007.

Examining ARV deliveries by country reveals that Emergency Plan programs are making progress in maximizing their purchasing ability by procuring generic ARVs approved by HHS/FDA, and the savings offer the potential to further expand support for vital prevention, treatment and care. Costs of total ARV deliveries by country in FY 2007 categorized by generic or innovator product appear in Table 3 below, and changes in generic spending appear in Figure 2. Notably, fourteen Emergency Plan focus countries had substantial increases in the amount spent (and proportion of ARV spending) on generic drugs procured between FY 2005 and FY 2007, which reflects the success of the FDA/HHS approval process, the development of the supply-chain management infrastructure, and adoption by country regulatory bodies.

Table 3. Total ARV Deliveries in FY 2007 by Innovator and Generic

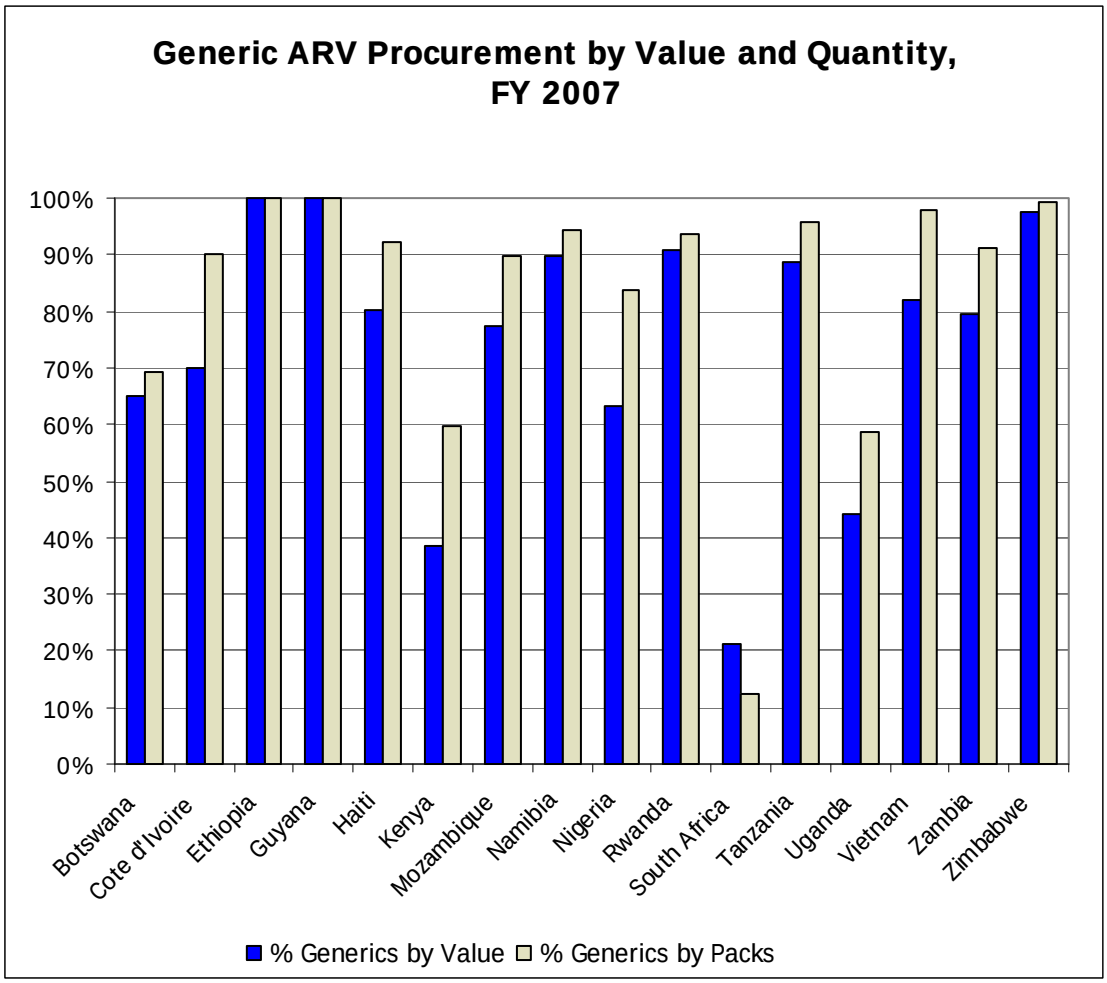
Total ARV Deliveries in FY 2005 and FY 2007 by Innovator and Generic					
COUNTRY	**Year**	**Innovator**	**Generic**	**Total**	**Generic (%)**
Botswana	2005	$5,648,614	$1,850,000	$7,498,614	25%
	2007	$3,111,972	$5,802,073	$8,914,044	65%
Cote d'Ivoire	2005	$3,659,463	$0	$3,659,463	0%
	2007	$3,196,616	$7,428,271	$10,624,887	70%
Ethiopia	2005	$11,639,711	$0	$11,639,711	0%
	2007	$0	$622,115	$622,115	100%
Guyana	2005	$741,079	$3,635	$744,714	0%
	2007	$0	$10,422	$10,422	100%
Haiti	2005	$2,280,879	$2,334,911	$4,615,790	51%
	2007	$61,793	$249,394	$311,187	80%
Kenya	2005	$22,873,492	$105,582	$22,979,074	0%
	2007	$14,886,546	$9,256,824	$24,143,370	38%
Mozambique	2005	$1,853,660	$230,900	$2,084,560	11%
	2007	$1,206,900	$4,117,059	$5,323,958	77%
Namibia	2005	$1,122,409	$12,162	$1,134,571	1%
	2007	$376,833	$3,283,240	$3,660,074	90%
Nigeria	2005	$13,763,247	$4,536,237	$18,299,484	25%
	2007	$6,977,904	$11,945,978	$18,923,881	63%
Rwanda	2005	$8,213,076	$0	$8,213,076	0%
	2007	$184,304	$1,813,777	$1,998,081	91%
South Africa	2005	$3,731,836	$0	$3,731,836	0%
	2007	$11,918,240	$3,221,046	$15,139,286	21%
Tanzania	2005	$4,427,795	$0	$4,427,795	0%
	2007	$374,634	$2,901,484	$3,276,118	89%
Uganda	2005	$12,918,721	$421,094	$13,339,815	3%
	2007	$10,218,218	$8,032,168	$18,250,386	44%
Vietnam	2005	$2,508,066	$0	$2,508,066	0%
	2007	$585,792	$2,683,079	$3,268,871	82%
Zambia	2005	$10,711,381	$4,212,822	$14,924,203	28%
	2007	$3,091,759	$11,882,441	$14,974,200	79%
Zimbabwe	2005	N/A	N/A	N/A	N/A
	2007	$57,036	$2,106,050	$2,163,086	97%
Total (2005):		**$106,093,429**	**$13,707,343**	**$119,800,772**	**11%**
Total (2007):		**$56,248,546**	**$75,355,420**	**$131,603,966**	**57%**

Figure 2. Progress in Generic ARV Procurements



These improvements are even more dramatic when examining the actual numbers of packs of ARV drugs delivered to each country in FY 2007 as represented in Figure 3 below. For example, in Cote d'Ivoire, 70 percent of the Emergency Plan's spending for ARVs was for generic drugs, whereas the proportion of ARV packs delivered that were generic was closer to 90 percent. This dramatic increase translates into huge savings, and has allowed PEPFAR to increase access to life-saving treatment for more persons in need.

Figure 3. Generic Procurement, by Value and Quantity in FY 2007



* U.S. Government procurements in South Africa are in accordance with the guidelines and tender processes of the South African Department of Health, and reflect continued reliance on branded products.

With the increased use of generic ARVs between FY 2005 and FY 2007, and continued decline in the cost of many generic ARVs, it would be expected that absolute savings generated through generic use would also increase. Table 4 shows the estimated savings per generic medication purchased through PEPFAR, compared with its cost if purchased using Accelerated Access Initiative (AAI) prices, a mechanism developed by selected innovator companies to provide reduced prices for ARVs to the developing world. Comparing PEPFAR's actual cost for these purchases of $75,355,421with an estimated cost of $139,404,389 at AAI prices, the overall estimated savings achieved through generic purchases of ARVs in FY 2007 was $64,048,968. Major drivers of these savings were

commonly used medications such as the non-nucleoside reverse transcriptase inhibitors (NNRTI), nevirapine (~$24 million in savings), and the generic, fixed-dose-combination of lamivudine/stavudine and nevirapine (~$14 million in savings).

Table 4. Estimated Savings: Use of Generic Products of the President's Emergency Plan for AIDS Relief

Estimated Savings Through the Use of Generic Products*						
Product	**Line**	**AAI Unit Price**	**Units Delivered**	**AAI Cost**	**Actual Cost**	**Estimated Savings**
Abacavir 20mg/ml	2	$25.00	15,708	$392,700	$309,935	$82,765
Abacavir 300mg	2	$52.29	80,195	$4,193,397	$2,861,007	$1,332,390
Didanosine 100mg	2	$12.75	5,149	$65,650	$50,884	$14,766
Didanosine 200mg	2	$25.50	240	$6,120	$4,476	$1,644
Efavirenz 200mg	1	$32.42	5,826	$188,879	$98,435	$90,444
Efavirenz 50mg	1	$3.47	9,992	$34,672	$27,015	$7,657
Efavirenz 600mg	1	$19.50	1,176,116	$22,934,262	$19,906,169	$3,028,093
Lamivudine 10mg/ml	1	$6.73	138,904	$934,824	$594,787	$340,037
Lamivudine 150mg	1	$5.70	1,317,074	$7,507,322	$6,162,986	$1,344,336
Lamivudine/Stavudine 150/30mg	1	$9.66	213,173	$2,059,251	$462,576	$1,596,675
Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	$27.66	727,684	$20,127,739	$5,893,298	$14,234,442
Lamivudine/Stavudine/Nevirapine 150/40/200mg	1	$28.20	14,116	$398,071	$288,697	$109,374
Lamivudine/Zidovudine 150/300mg	1	$19.50	1,232,937	$24,042,272	$16,394,921	$7,647,350
Lamivudine/Zidovudine/Nevirapine 150/300/200mg	1	$37.50	185,136	$6,942,600	$3,327,632	$3,614,968
Lamivudine/Zidovudine+Abacavir 150/300+300mg	1	$70.00	1,814	$126,980	$130,324	-$3,344
Lamivudine/Zidovudine+Efavirenz 150/300+600mg	1	$39.00	642	$25,038	$17,860	$7,178
Lamivudine/Zidovudine+Nevirapine 150/300+200mg	1	$37.50	152,380	$5,714,250	$3,355,731	$2,358,519
Nevirapine 200mg	1	$18.00	1,827,484	$32,894,712	$8,883,978	$24,010,734
Nevirapine 50mg/5ml	1	$12.50	191,472	$2,393,400	$1,501,784	$891,616
Stavudine 15mg	1	$4.93	60,052	$296,056	$206,306	$89,750
Stavudine 1mg/ml	1	$4.50	107,277	$482,747	$176,867	$305,879
Stavudine 20mg	1	$5.64	20,582	$116,082	$54,473	$61,610
Stavudine 30mg	1	$3.96	363,260	$1,438,510	$964,888	$473,622
Stavudine 40mg	1	$4.50	179,198	$806,391	$562,870	$243,521
Zidovudine 100mg	1	$15.77	3,900	$61,503	$46,606	$14,897
Zidovudine 300mg	1	$17.40	252,229	$4,388,785	$2,643,576	$1,745,209
Zidovudine 50mg/5ml	1	$7.10	117,208	$832,177	$427,342	$404,835
Total:				**$139,404,389**	**$75,355,421**	**$64,048,968**
						46%

*Estimated savings are determined by calculating the difference between the actual cost of generic deliveries and the estimated cost of all generic ARVs delivered at their AAI prices.

The bulk of the savings consisted of agents used in first-line regimens, as the main cost drivers in second-line regimens, such as protease inhibitors, are not yet available in generic form (Figures 4a, 4b).

Figure 4a. Estimated Savings: First-Line Antiretrovirals

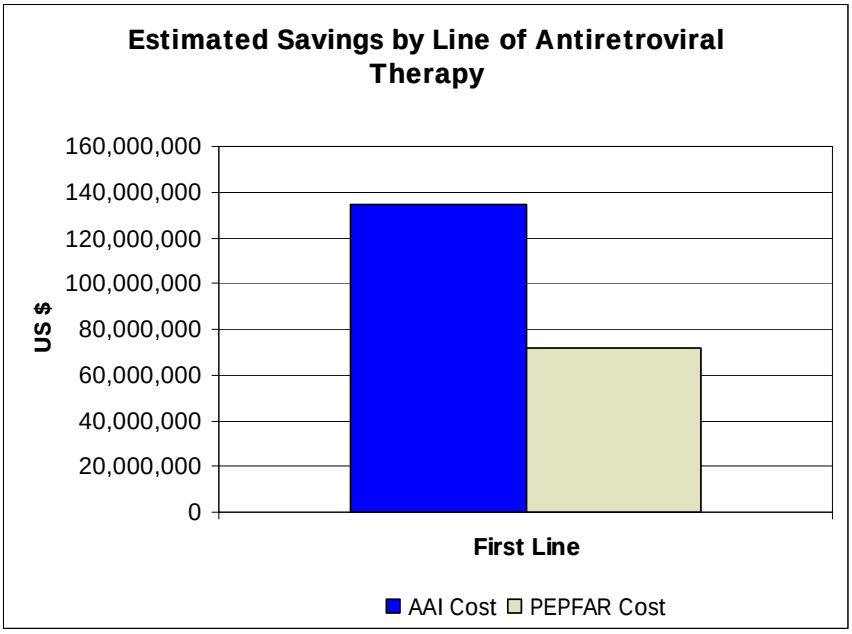
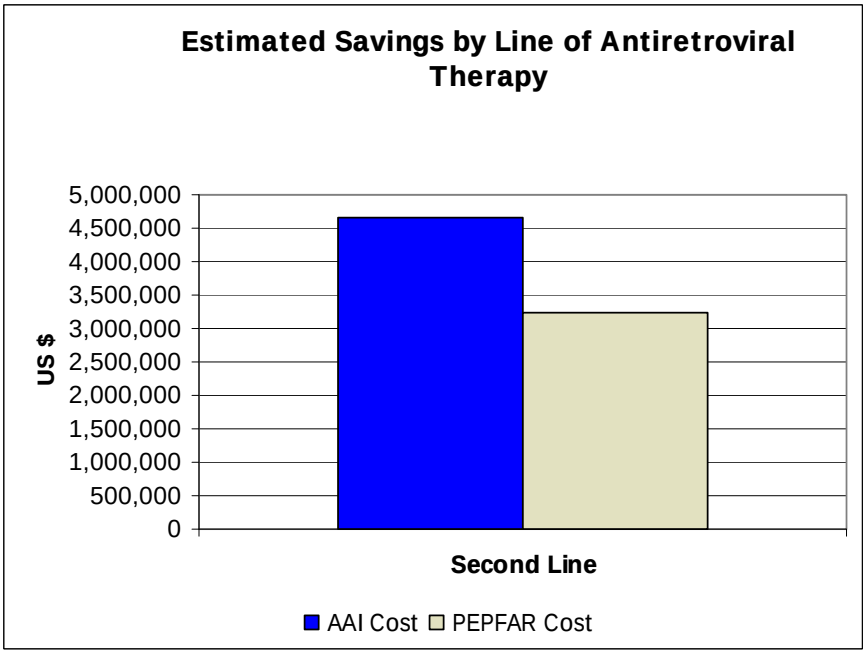


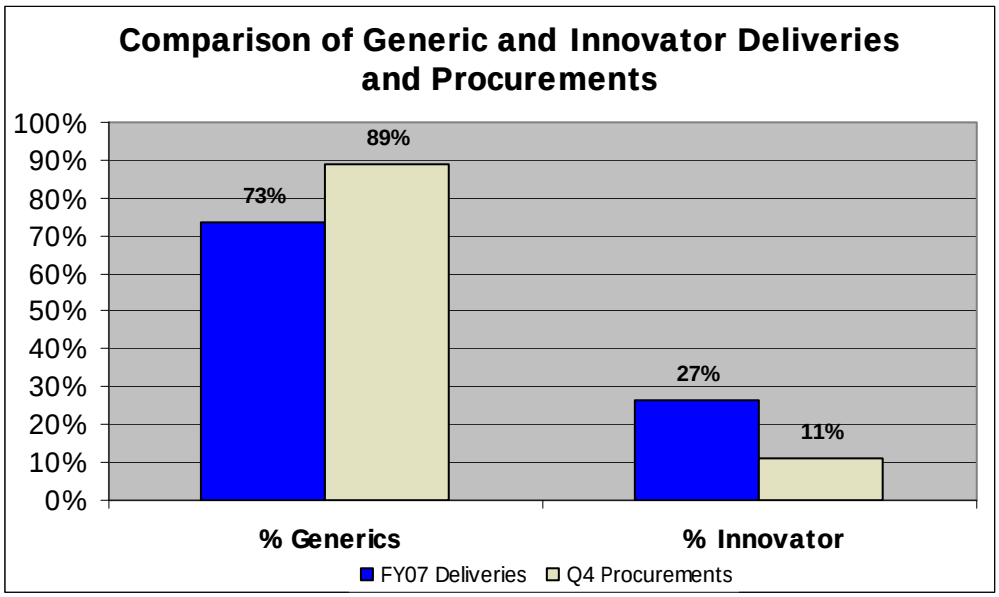
Figure 4b. Estimated Savings: Second-Line Antiretrovirals



Procurement involves both ordering drugs and the actual delivery of the product at a later date. Figure 5 compares delivery data from all of FY 2007 with

data from the fourth quarter of FY 2007. Evaluation of such data provides an indication of whether previously reported trends toward the greater use of generics will continue into FY 2008. Whereas 73 percent of Emergency Plan deliveries (by packs) were of generic products in all of FY 2007, 89 percent of ARV drugs ordered in the fourth quarter of FY 2007 were generic. This trend likely portends the even more widespread use of generics (and cost savings) in the coming year, as regulatory barriers are addressed internationally and countries are able to benchmark their purchasing with other comparable settings worldwide.

Figure 5. Comparison of Generic and Innovator Deliveries and Procurements under the Emergency Plan



FUTURE DIRECTIONS AND CHALLENGES

Pediatric Treatment

There are a number of challenges to providing HIV treatment to children who are living with HIV infection. These include a lack of health-care providers trained in the complexities of delivering pediatric care to HIV-infected youth, poorly defined regulatory paths for pediatric formulations, a lack of incentives for pharmaceutical companies to produce drugs for this market, and limited information about pediatric dosing based on weight and age. PEPFAR has

worked to meet each of these challenges, through the education and training of HIV providers in pediatric HIV care; the development of dosing guides along with partners; and collaborative public-private partnerships with pharmaceutical companies, implementing organizations, and multilateral health organizations. These efforts bring together a wide range of expertise to maximize the utility of currently available pediatric formulations, and to accelerate children's access to life-saving treatment.

Progress toward greater access to pediatric treatments is clear in the list of generic ARVs approved by HHS/FDA, which now includes 14 formulations for pediatric use. In addition, the number of children who are receiving treatment supported by PEPFAR through site-specific support has increased significantly, from 17,700 in 2005 to 85,900 in 2007. Through the Pediatric Technical Working Group, the First Lady's Public-Private Partnership Initiative, and numerous other partnerships, PEPFAR plans to continue to improve upon these achievements yearly.

Moving Toward Better Regimens

Data from several studies have suggested that d4T (a component of the commonly used first-line regimen of d4T/3TC/NVP), while effective in suppressing HIV viral loads, is associated with numerous metabolic and other toxicities that substitution by other agents, such tenofovir or zidovudine could mitigate. To date, normative guidance from the WHO Secretariat still includes d4T-based regimens in its recommendations, primarily because its cost allows for many more individuals to receive treatment. PEPFAR has been working with HHS/FDA and manufacturers to ensure that high-quality generic versions of tenofovir are quickly approved to allow for substitution for less-optimal agents. These processes occur in tandem with development and promulgation of updated guidance from normative bodies, such as WHO.

Increasing Access to ARVs Used in Second-Line Regimens

As demonstrated in this report, the use of HHS/FDA-approved generics can significantly reduce costs. However, many of the available generics approved by HHS/FDA are primarily part of first-line regimens. Second-line regimens are vital for patients who are unable to use first-line regimens because of failure or resistance. Although the exact proportion varies, an estimated 10 percent of patients fail or become resistant to one or more drugs, each year. Second-line

regimens are more complicated, and often employ branded medications, such as boosted protease inhibitors, in addition to two or three NRTI medications. Although numerous NRTIs used in second-line regimens are available as generics, protease inhibitors are often the primary cost-driver in second-line regimens. In February 2008, the first generic protease inhibitor (atazanavir sulfate) received tentative approval from HHS/FDA, a historic achievement that is expected to lower prices of other branded protease inhibitors moving forward. PEPFAR will continue to work with both generic and innovator manufacturers to reduce the costs of and increase access to crucial second-line medications.

CONCLUSION

The data in this report reflect a true success story, one that has contributed to PEPFAR's support for 1.45 million people on life-saving treatment. Pooled procurement and refined regulatory pathways, including HHS/FDA approval and tentative approval, have led to dramatic reductions in ARV cost under the Emergency Plan. The cost of ARVs is no longer a major barrier to getting patients on first-line ART, although further progress is needed in expanding approvals and lowering the costs of second-line agents, such as protease inhibitors. As demonstrated in this report, PEPFAR continues to innovate to provide the best possible care and treatment to those who are suffering with HIV in areas of the world with the highest burden.

Appendix 1. Quantities and Costs of ARVs Purchased, by Country

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
Botswana	Aspen	Lamivudine/Zidovudine 150/300mg	1,2	5,523,375	357,500	15.45	185.40
		Stavudine 15mg	1,Pediatric	180,961	48,128	3.76	45.12
		Stavudine 20mg	1,Pediatric	12,610	4,440	2.84	34.08
		Stavudine 30mg	1	66,186	22,210	2.98	35.76
		Stavudine 40mg	1	18,941	6,110	3.10	37.20
	Total Generic			5,802,073	438,388		
	Abbott	Kaletra 133.3/33.3mg	2	421,522	10,256	41.10	493.20
		Norvir 100mg	2	11,220	1,170	9.59	115.08
	Aspen	Viread 300mg	1,2	108,800	6,400	17.00	204.00
	Boehringer	Viramune 200mg	1,2	1,487,446	54,000	27.55	330.54
	Gilead	Viread 300mg	1,2	93,839	4,566	20.55	246.62
	Glaxo	Epivir 150mg	1,2	219,222	38,460	5.70	68.40
		Retrovir 100mg	1,2,Pediatric	316,346	20,060	15.77	189.24
		Retrovir 300mg	1,2	17,674	400	44.19	530.23
		Retrovir 50mg/5ml	1,2,Pediatric	410,220	60,000	6.84	82.04
		Ziagen 20mg/ml	1,2,Pediatric	25,682	820	31.32	375.84
	Total Innovator			3,111,972	196,132		
	Total			**8,914,044**	**634,520**		
Cote d'Ivoire	Aurobindo	Abacavir 20mg/ml	1,2,Pediatric	24,750	1,500	16.50	198.00
		Abacavir 300mg	1,2	548,205	14,427	38.00	455.98
		Didanosine 100mg	2,Pediatric	13,144	1,696	7.75	93.00
		Efavirenz 50mg	1,2,Pediatric	10,114	4,515	2.24	26.88
		Efavirenz 600mg	1,2	2,839,286	173,941	16.32	195.88
		Lamivudine 150mg	1,2	9,561	3,145	3.04	36.48
		Lamivudine/Zidovudine 150/300mg	1,2	1,220,211	112,264	10.87	130.43
		Lamivudine/Zidovudine+Abacavir 150/300+300mg	1	60,894	597	102.00	1,224.00
		Nevirapine 50mg/5ml	1,2,Pediatric	5,641	2,938	1.92	23.04
		Stavudine 15mg	1,Pediatric	5,240	2,437	2.15	25.80
		Stavudine 1mg/ml	1,Pediatric	42,675	29,389	1.45	17.42
		Zidovudine 100mg	1,2,Pediatric	12,449	1,197	10.40	124.80

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Zidovudine 300mg	1,2	254,923	30,250	8.43	101.13
		Zidovudine 50mg/5ml	1,2	46,313	13,678	3.39	40.63
	Cipla	Abacavir 300mg	1,2	165,180	6,000	27.53	330.36
		Lamivudine 10mg/ml	1,2,Pediatric	4,970	2,523	1.97	23.64
		Lamivudine/Stavudine 150/30mg	1	392,232	196,116	2.00	24.00
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	1,199,063	159,875	7.50	90.00
	Ranbaxy	Lamivudine 150mg	1,2	67,023	22,047	3.04	36.48
		Zidovudine 300mg	1,2	16,410	1,926	8.52	102.24
	Strides	Efavirenz 600mg	1,2	394,549	24,265	16.26	195.12
		Nevirapine 200mg	1,2	87,717	25,799	3.40	40.80
		Stavudine 30mg	1	7,723	5,081	1.52	18.24
		Total Generic		7,428,271	835,606		
	Abbott	Aluvia 200/50mg	2	630,022	15,326	41.11	493.30
		Kaletra 133.3/33.3mg	2	156,520	3,700	42.30	507.63
		Kaletra 80/20mg/ml	2,Pediatric	2,302	56	41.10	493.20
		Norvir 100mg	2	167,177	7,710	21.68	260.20
	BMS	Videx 200mg	2,Pediatric	289,017	11,334	25.50	306.00
		Videx 50mg	2,Pediatric	27,921	2,939	9.50	114.00
		Zerit 15mg	1,Pediatric	2,056	417	4.93	59.16
		Zerit 20mg	1,Pediatric	6,548	1,161	5.64	67.68
	Gilead	Viread 300mg	1,2	33,813	1,989	17.00	204.00
	Glaxo	Trizivir 150/300/300mg	1,2	103,314	1,203	85.88	1,030.56
		Ziagen 20mg/ml	1,2,Pediatric	4,842	177	27.36	328.28
	Hoffman	Invirase 200mg	2	198,808	2,532	78.52	942.22
		Viracept 250mg	2	368,587	5,060	72.84	874.12
	Merck	Crixivan 400mg	2	941,295	18,841	49.96	599.52
		Stocrin 200mg	1,2	128,837	3,974	32.42	389.04
		Stocrin 30mg/ml	1,2,Pediatric	90,925	5,358	16.97	203.64
		Stocrin 50mg	1,2,Pediatric	37,261	10,738	3.47	41.64
		Stocrin 600mg	1,2	7,371	471	15.65	187.80
		Total Innovator		3,196,616	92,986		
		Total		**10,624,887**	**928,592**		
Ethiopia	Aurobindo	Lamivudine 10mg/ml	1,2,Pediatric	54,890	27,863	1.97	23.64

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Lamivudine 150mg	1,2	190,958	62,815	3.04	36.48
		Nevirapine 50mg/5ml	1,2,Pediatric	141,658	22,848	6.20	74.40
		Stavudine 30mg	1	22,344	14,700	1.52	18.24
		Zidovudine 50mg/5ml	1,2	29,778	13,850	2.15	25.80
	Ranbaxy	Lamivudine 150mg	1,2	182,488	60,029	3.04	36.48
		Total Generic		622,115	202,105		
		Total		**622,115**	**202,105**		
Guyana	Aurobindo	Stavudine 15mg	1,Pediatric	1,415	602	2.35	28.20
		Zidovudine 300mg	1,2	7,304	809	9.03	108.34
	Ranbaxy	Zidovudine 300mg	1,2	1,703	209	8.15	97.80
		Total Generic		10,422	1,620		
		Total		**10,422**	**1,620**		
Haiti	Aurobindo	Efavirenz 600mg	1,2	87,648	4,565	19.20	230.40
		Lamivudine 10mg/ml	1,2,Pediatric	4,528	1,041	4.35	52.20
		Lamivudine 150mg	1,2	3,105	722	4.30	51.60
		Nevirapine 50mg/5ml	1,2,Pediatric	4,343	579	7.50	90.00
		Stavudine 30mg	1	1,537	439	3.50	42.00
		Zidovudine 100mg	1,2,Pediatric	3,214	309	10.40	124.80
		Zidovudine 50mg/5ml	1,2,Pediatric	5,988	943	6.35	76.20
	Cipla	Lamivudine/Zidovudine 150/300mg	1,2	114,207	9,931	11.50	138.00
		Nevirapine 200mg	1,2	24,825	5,707	4.35	52.20
		Total Generic		249,394	24,236		
	Abbott	Aluvia 200/50mg	2	31,236	760	41.10	493.20
		Kaletra 80/20mg/ml	2,Pediatric	1,578	72	21.92	263.04
	BMS	Zerit 15mg	1,Pediatric	197	40	4.93	59.16
		Zerit 20mg	1,Pediatric	525	93	5.64	67.68
	Gilead	Truvada 300/200mg	1,2	19,609	747	26.25	315.00
	Merck	Stocrin 200mg	1,2	6,707	207	32.40	388.80
		Stocrin 30mg/ml	1,2,Pediatric	1,883	111	16.96	203.52
		Stocrin 50mg	1,2,Pediatric	59	17	3.47	41.64
		Total Innovator		61,793	2,047		
		Total		**311,187**	**26,283**		

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation (a)	Total Cost (US$) (b)	Total Packages Delivered (c)	Mean Package Price (b÷c)	Estimated per Patient Annual Cost (b÷c×12)
Kenya	Aurobindo	Efavirenz 600mg	1,2	367,645	23,635	15.56	186.66
		Lamivudine 150mg	1,2	100,595	32,450	3.10	37.20
		Nevirapine 200mg	1,2	99,989	28,650	3.49	41.88
		Stavudine 30mg	1	43,323	27,950	1.55	18.60
		Stavudine 40mg	1	39,638	22,650	1.75	21.00
	Cipla	Efavirenz 600mg	1,2	791,651	57,366	13.80	165.60
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	569,668	59,965	9.50	114.00
		Stavudine 40mg	1	25,376	6,344	4.00	48.00
	Glaxo	Lamivudine/Zidovudine 150/300mg	1,2	206,500	10,000	20.65	247.80
	Ranbaxy	Lamivudine 150mg	1,2	2,723,315	631,145	4.31	51.78
		Nevirapine 200mg	1,2	2,377,096	520,456	4.57	54.81
		Zidovudine 300mg	1,2	1,732,449	155,936	11.11	133.32
	Strides	Stavudine 30mg	1	22,878	13,618	1.68	20.16
		Stavudine 40mg	1	156,703	72,885	2.15	25.80
		Total Generic		9,256,824	1,663,050		
	Abbott	Kaletra 133.3/33.3mg	2	613,734	12,899	47.58	570.96
		Kaletra 200/50mg	2	680,584	14,304	47.58	570.96
	BMS	Videx 100mg	2	27,318	1,690	16.16	193.97
		Videx 200mg	2	47,398	1,714	27.65	331.84
		Videx 25mg	2,Pediatric	757	98	7.72	92.64
		Videx 50mg	2,Pediatric	23,408	2,282	10.26	123.09
		Zerit 15mg	1,Pediatric	25,639	4,713	5.44	65.28
		Zerit 20mg	1,Pediatric	41,780	6,717	6.22	74.64
		Zerit 30mg	1	638,667	146,148	4.37	52.44
		Zerit 40mg	1	713,020	143,754	4.96	59.52
	Boehringer	Viramune 50mg/5ml	1,2,Pediatric	1,406,975	83,270	16.90	202.76
	Gilead	Viread 300mg	1,2	678,248	36,466	18.60	223.19
	Glaxo	Epivir 10mg/ml	1,2,Pediatric	1,218,348	144,354	8.44	101.28
		Epivir 150mg	1,2	122,200	26,000	4.70	56.40
		Retrovir 100mg	1,2	369,832	23,429	15.79	189.42
		Retrovir 50mg/5ml	1,2,Pediatric	1,999,449	226,182	8.84	106.08
		Ziagen 20mg/ml	1,2,Pediatric	106,644	3,821	27.91	334.92
		Ziagen 300mg	1,2	1,447,373	25,649	56.43	677.16

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
	Hoffman	Invirase 200mg	2	22,693	247	91.87	1,102.47
		Viracept 250mg	2	140,503	1,516	92.68	1,112.16
	Merck	Stocrin 200mg	1,2	575,252	16,417	35.04	420.48
		Stocrin 30mg/ml	1,2,Pediatric	309,946	16,900	18.34	220.08
		Stocrin 50mg	1,2,Pediatric	93,694	24,985	3.75	45.00
		Stocrin 600mg	1,2	3,583,087	155,490	23.04	276.53
		Total Innovator		14,886,546	1,119,045		
		Total		**24,143,370**	**2,782,095**		
Mozambique	Aurobindo	Abacavir 20mg/ml	1,2,Pediatric	64,667	3,034	21.31	255.77
		Abacavir 300mg	1,2	233,673	6,540	35.73	428.76
		Efavirenz 200mg	1,2	11,746	693	16.95	203.40
		Efavirenz 50mg	1,2,Pediatric	10,205	2,984	3.42	41.04
		Efavirenz 600mg	1,2	1,028,015	61,374	16.75	201.00
		Lamivudine/Zidovudine 150/300mg	1,2	171,178	16,956	10.10	121.14
		Lamivudine/Zidovudine/Nevirapine 150/300/200mg	1	1,221,448	69,797	17.50	210.00
		Lamivudine/Zidovudine+Abacavir 150/300+300mg	1	69,430	1,217	57.05	684.60
		Stavudine 15mg	1,Pediatric	7,724	3,287	2.35	28.20
		Stavudine 1mg/ml	1,Pediatric	239	165	1.45	17.40
		Stavudine 30mg	1	958	630	1.52	18.24
		Zidovudine 50mg/5ml	1,2,Pediatric	43,193	10,935	3.95	47.40
	Cipla	Efavirenz 600mg	1,2	434,043	25,913	16.75	201.00
		Lamivudine 10mg/ml	1,2,Pediatric	26,818	10,991	2.44	29.28
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	458,800	62,000	7.40	88.80
		Lamivudine/Zidovudine/Nevirapine 150/300/200mg	1	300,843	17,191	17.50	210.00
	Ranbaxy	Zidovudine 300mg	1,2	34,080	4,000	8.52	102.24
		Total Generic		4,117,059	297,707		
	Abbott	Aluvia 200/50mg	2	358,808	8,729	41.11	493.26
		Norvir 100mg	2	5,485	143	38.36	460.32
	BMS	Videx 250mg	2	807	44	18.34	220.08
	Gilead	Viread 300mg	1,2	165,682	9,746	17.00	204.00
	Glaxo	Trizivir 150/300/300mg	1,2	190,400	2,720	70.00	840.00
	Hoffman	Invirase 200mg	2	116,839	1,529	76.42	916.99
		Viracept 250mg	2	266,103	3,343	79.60	955.20

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
	Merck	Crixivan 400mg	2	64,313	1,304	49.32	591.84
		Stocrin 200mg	1,2	18,144	560	32.40	388.80
		Stocrin 50mg	1,2,Pediatric	20,318	5,941	3.42	41.04
	Total Innovator			1,206,900	34,059		
	Total			**5,323,958**	**331,766**		
Namibia	Aurobindo	Efavirenz 50mg	1,2,Pediatric	2,858	1,100	2.60	31.18
		Efavirenz 600mg	1,2	2,181,972	103,873	21.01	252.07
		Nevirapine 200mg	1,2	1,006,991	199,617	5.04	60.54
		Nevirapine 50mg/5ml	1,2,Pediatric	56,946	14,800	3.85	46.17
		Stavudine 30mg	1	849	310	2.74	32.86
		Zidovudine 50mg/5ml	1,2,Pediatric	33,624	8,146	4.13	49.53
	Total Generic			3,283,240	327,846		
	Abbott	Aluvia 200/50mg	2	331,845	6,018	55.14	661.70
	BMS	Zerit 1mg/ml	1,Pediatric	5,192	3,000	1.73	20.77
	Glaxo	Epivir 10mg/ml	1,2,Pediatric	37,368	9,979	3.74	44.94
	Merck	Stocrin 30mg/ml	1,2,Pediatric	2,429	100	24.29	291.45
	Total Innovator			376,833	19,097		
	Total			**3,660,074**	**346,943**		
Nigeria	Aspen	Lamivudine/Zidovudine+Nevirapine 150/300+200mg	1	1,516,209	66,885	22.67	272.03
	Aurobindo	Abacavir 20mg/ml	1,2,Pediatric	80,147	4,225	18.97	227.64
		Abacavir 300mg	1,2	41,943	1,284	32.67	391.99
		Efavirenz 200mg	1,2	5,762	335	17.20	206.40
		Efavirenz 50mg	1,2,Pediatric	3,704	1,347	2.75	33.00
		Efavirenz 600mg	1,2	1,586,025	85,675	18.51	222.15
		Lamivudine 10mg/ml	1,2,Pediatric	390,292	75,136	5.19	62.33
		Lamivudine 150mg	1,2	1,031,697	248,477	4.15	49.82
		Lamivudine/Zidovudine 150/300mg	1,2	1,929,997	124,212	15.54	186.46
		Lamivudine/Zidovudine+Efavirenz 150/300+600mg	1	17,860	642	27.82	333.84
		Lamivudine/Zidovudine+Nevirapine 150/300+200mg	1	965,672	56,217	17.18	206.13
		Nevirapine 200mg	1,2	372,523	98,305	3.79	45.47

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Nevirapine 50mg/5ml	1,2,Pediatric	1,178,344	131,762	8.94	107.32
		Stavudine 1mg/ml	1,Pediatric	106,048	59,223	1.79	21.49
		Stavudine 20mg	1,Pediatric	31,001	10,987	2.82	33.86
		Stavudine 30mg	1	475,186	153,669	3.09	37.11
		Stavudine 40mg	1	226,464	65,881	3.44	41.25
		Zidovudine 100mg	1,2,Pediatric	15,215	1,463	10.40	124.80
		Zidovudine 300mg	1,2	184,625	20,000	9.23	110.78
		Zidovudine 50mg/5ml	1,2,Pediatric	210,509	48,896	4.31	51.66
	Cipla	Lamivudine 10mg/ml	1,2,Pediatric	1,010	390	2.59	31.08
		Lamivudine/Stavudine 150/30mg	1	11,070	4,920	2.25	27.00
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	232,305	28,615	8.12	97.42
		Lamivudine/Stavudine/Nevirapine 150/40/200mg	1	34,057	4,423	7.70	92.40
		Lamivudine/Zidovudine 150/300mg	1,2	129,950	11,300	11.50	138.00
		Nevirapine 200mg	1,2	217,048	49,896	4.35	52.20
	Ranbaxy	Lamivudine 150mg	1,2	35,224	11,526	3.06	36.67
		Nevirapine 200mg	1,2	768,669	156,146	4.92	59.07
		Zidovudine 300mg	1,2	142,081	13,528	10.50	126.03
	Strides	Nevirapine 200mg	1,2	4,277	1,198	3.57	42.84
		Stavudine 30mg	1	1,064	700	1.52	18.24
		Total Generic		11,945,978	1,537,263		
	Abbott	Aluvia 200/50mg	2	876,591	20,880	41.98	503.79
		Kaletra 133.3/33.3mg	2	144,347	3,220	44.83	537.94
		Kaletra 80/20mg/ml	2,Pediatric	81,486	1,970	41.36	496.36
		Norvir 100mg	2	49,868	1,300	38.36	460.32
	Aspen	Truvada 300/200mg	1,2	2,142,683	81,626	26.25	315.00
		Viread 300mg	1,2	32,691	1,923	17.00	204.00
	BMS	Videx 250mg	2	23,682	1,250	18.95	227.34
		Videx 25mg	2,Pediatric	6,377	911	7.00	84.00
		Videx 2g/237ml	2,Pediatric	378	30	12.59	151.08
		Videx 400mg	2	19,728	803	24.57	294.82
		Videx 50mg	2,Pediatric	1,785	180	9.92	119.00
		Zerit 15mg	1,Pediatric	9,490	1,925	4.93	59.16
		Zerit 20mg	1,Pediatric	10,857	1,925	5.64	67.68
	Boehringer	Viramune 200mg	1,2	311,760	17,320	18.00	216.00

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Viramune 50mg/5ml	1,2,Pediatric	89,600	5,600	16.00	192.00
	Gilead	Truvada 300/200mg	1,2	1,416,743	52,015	27.24	326.85
		Viread 300mg	1,2	695,011	40,883	17.00	204.00
	Glaxo	Combivir 150/300mg	1,2	215,163	11,034	19.50	234.00
		Epivir 150mg	1,2	105,450	18,500	5.70	68.40
		Retrovir 50mg/5ml	1,2,Pediatric	49,587	7,368	6.73	80.76
		Ziagen 20mg/ml	1,2,Pediatric	6,000	240	25.00	300.00
	Hoffman	Invirase 200mg	2	116,488	1,440	80.89	970.73
		Invirase 500mg	2	54,025	624	86.58	1,038.94
		Viracept 250mg	2	20,513	254	80.76	969.12
		Viracept 50mg/g	2,Pediatric	26,349	816	32.29	387.48
	Merck	Crixivan 400mg	2	95,400	1,908	50.00	600.00
		Stocrin 200mg	1,2	318,816	9,840	32.40	388.80
		Stocrin 30mg/ml	1,2,Pediatric	17,486	1,031	16.96	203.52
		Stocrin 50mg	1,2,Pediatric	39,551	11,398	3.47	41.64
		Total Innovator		6,977,904	298,214		
		Total		**18,923,881**	**1,835,477**		
Rwanda	Aurobindo	Abacavir 20mg/ml	1,2,Pediatric	1,935	90	21.50	258.00
		Abacavir 300mg	1,2	21,480	600	35.80	429.60
	Cipla	Abacavir 300mg	1,2	202,341	5,605	36.10	433.20
		Efavirenz 600mg	1,2	1,087,970	71,577	15.20	182.40
		Lamivudine/Zidovudine 150/300mg	1,2	483,661	48,463	9.98	119.76
	Ranbaxy	Lamivudine 150mg	1,2	15,550	4,698	3.31	39.72
	Strides	Stavudine 30mg	1	188	117	1.61	19.32
		Stavudine 40mg	1	652	306	2.13	25.56
		Total Generic		1,813,777	131,456		
	Abbott	Kaletra 80/20mg/ml	2,Pediatric	2,055	50	41.10	493.20
	BMS	Videx 50mg	2,Pediatric	1,729	182	9.50	114.00
	Gilead	Viread 300mg	1,2	136,000	8,000	17.00	204.00
	Hoffman	Viracept 250mg	2	38,920	400	97.30	1,167.60
	Merck	Crixivan 400mg	2	5,600	112	50.00	600.00
		Total Innovator		184,304	8,744		
		Total		**1,998,081**	**140,200**		

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation (a)	Total Cost (US$) (b)	Total Packages Delivered (c)	Mean Package Price (b÷c)	Estimated per Patient Annual Cost (b÷c×12)
South Africa	Aspen	Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	7,623	210	36.30	435.60
		Lamivudine/Stavudine/Nevirapine 150/40/200mg	1	1,089	30	36.30	435.60
		Didanosine 100mg	2	1,635	13	125.75	1,509.00
		Lamivudine 10mg/ml	1,2,Pediatric	37,357	4,162	8.98	107.71
		Lamivudine 150mg	1,2	593,682	6,538	90.80	1,089.66
		Lamivudine/Zidovudine 150/300mg	1,2	7,843	45	174.28	2,091.37
		Lamivudine/Zidovudine+Nevirapine 150/300+200mg	1	67,590	1,160	58.27	699.21
		Nevirapine 200mg	1,2	6,016	52	115.70	1,388.34
		Stavudine 20mg	1,Pediatric	423	109	3.88	46.56
		Stavudine 30mg	1	7,389	342	21.60	259.25
		Stavudine 40mg	1	7,386	233	31.70	380.37
		Zidovudine 300mg	1,2	38,660	161	240.13	2,881.51
	Cipla	Lamivudine 10mg/ml	1,2,Pediatric	18,332	671	27.32	327.84
		Lamivudine 150mg	1,2	295,627	3,033	97.47	1,169.64
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	231,177	7,023	32.92	395.00
		Lamivudine/Stavudine/Nevirapine 150/40/200mg	1	228,368	6,933	32.94	395.27
		Lamivudine/Zidovudine 150/300mg	1,2	323,635	8,740	37.03	444.35
		Nevirapine 200mg	1,2	1,108,635	28,775	38.53	462.33
		Nevirapine 50mg/5ml	1,2,Pediatric	147	2	73.35	880.26
		Stavudine 30mg	1	119,041	6,528	18.24	218.83
		Stavudine 40mg	1	87,712	4,789	18.32	219.78
		Zidovudine 100mg	1,2,Pediatric	644	31	20.78	249.41
	Merck	Efavirenz 600mg	1,2	8,251	50	165.01	1,980.12
	Ranbaxy	Lamivudine 150mg	1,2	22,786	3,804	5.99	71.88
		Total Generic		3,221,046	83,434		
	Abbott	Kaletra 133.3/33.3mg	2	452,398	7,892	57.32	687.88
		Kaletra 80/20mg/ml	2,Pediatric	87,566	1,480	59.17	709.99
		Norvir 100mg	2	5,634	500	11.27	135.21
		Norvir 80mg/ml	2,Pediatric	3,580	387	9.25	111.01
	Aspen	Truvada 300/200mg	1	794	18	44.11	529.36
		Viread 300mg	1,2	5,491	200	27.46	329.47
	BMS	Reyataz 150mg	2	6,201	173	35.84	430.13

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Videx 100mg	2	22,282	636	35.04	420.42
		Videx 150mg	2	1,550	82	18.90	226.76
		Videx 250mg	2	86,381	4,217	20.48	245.81
		Videx 25mg	2,Pediatric	4,496	186	24.17	290.04
		Videx 2g/237ml	2,Pediatric	198	15	13.18	158.17
		Videx 2g/237ml	2,Pediatric	451	30	15.03	180.31
		Videx 400mg	2	185,730	7,079	26.24	314.84
		Videx 50mg	2,Pediatric	417	22	18.97	227.60
		Zerit 15mg	1,Pediatric	2,883	282	10.22	122.70
		Zerit 1mg/ml	1,Pediatric	55,170	21,359	2.58	31.00
		Zerit 20mg	1,Pediatric	34,044	4,412	7.72	92.59
		Zerit 30mg	1	781,253	69,855	11.18	134.21
		Zerit 40mg	1	446,932	65,184	6.86	82.28
	Boehringer	Viramune 200mg	1,2	314,927	6,659	47.29	567.52
		Viramune 50mg/5ml	1,2,Pediatric	140,640	4,706	29.89	358.62
	Gilead	Truvada 300/200mg	1,2	7,276	165	44.10	529.20
		Viread 300mg	1,2	13,167	493	26.71	320.49
	Glaxo	Combivir 150/300mg	1,2	1,030,901	40,048	25.74	308.90
		Epivir 10mg/ml	1,2,Pediatric	87,986	10,804	8.14	97.73
		Epivir 150mg	1,2	1,028,719	148,592	6.92	83.08
		Retrovir 100mg	1,2,Pediatric	32,796	1,304	25.15	301.80
		Retrovir 250mg	1,2	856	40	21.40	256.79
		Retrovir 300mg	1,2	280,107	7,727	36.25	435.01
		Retrovir 50mg/5ml	1,2,Pediatric	47,718	4,531	10.53	126.38
		Ziagen 20mg/ml	1,2,Pediatric	23,555	545	43.22	518.64
		Ziagen 300mg	1,2	169,314	1,997	84.78	1,017.41
	Hoffman	Invirase 200mg	2	73,281	872	84.04	1,008.45
		Viracept 250mg	2	10,956	130	84.27	1,011.29
		Viracept 50mg/g	2,Pediatric	566	15	37.76	453.16
	Merck	Crixivan 400mg	2	2,240	58	38.62	463.39
		Stocrin 200mg	1,2	258,797	4,722	54.81	657.68
		Stocrin 50mg	1,2,Pediatric	49,962	9,451	5.29	63.44
		Stocrin 600mg	1,2	6,161,026	166,785	36.94	443.28
	Total Innovator			11,918,240	593,653		

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Total		**15,139,286**	**677,087**		
Tanzania	Aurobindo	Abacavir 300mg	1,2	827,481	23,114	35.80	429.60
		Efavirenz 600mg	1,2	1,034,591	63,628	16.26	195.12
		Lamivudine/Zidovudine 150/300mg	1,2	843,485	78,978	10.68	128.16
		Nevirapine 200mg	1,2	145,137	40,281	3.60	43.24
	Cipla	Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	50,790	6,772	7.50	90.00
		Total Generic		2,901,484	212,773		
	Abbott	Aluvia 200/50mg	2	341,541	8,310	41.10	493.20
		Kaletra 80/20mg/ml	2,Pediatric	12,083	294	41.10	493.20
		Norvir 100mg	2	12,045	314	38.36	460.32
	BMS	Videx 2g	2,Pediatric	8,964	712	12.59	151.08
		Total Innovator		374,634	9,630		
		Total		**3,276,118**	**222,403**		
Uganda	Aspen	Lamivudine/Zidovudine 150/300mg	1,2	564,048	32,753	17.22	206.66
		Lamivudine/Zidovudine+Nevirapine 150/300+200mg	1	806,261	28,118	28.67	344.09
	Aurobindo	Abacavir 20mg/ml	1,2,Pediatric	24,116	1,174	20.54	246.50
		Didanosine 100mg	2	2,580	240	10.75	129.00
		Didanosine 200mg	2	4,476	240	18.65	223.80
		Efavirenz 50mg	1,2,Pediatric	134	46	2.91	34.94
		Efavirenz 600mg	1,2	1,689,752	107,610	15.70	188.43
		Lamivudine 150mg	1,2	299,159	59,729	5.01	60.10
		Lamivudine/Zidovudine 150/300mg	1,2	511,986	40,438	12.66	151.93
		Lamivudine/Zidovudine/Nevirapine 150/300/200mg	1	1,060,342	55,148	19.23	230.73
		Nevirapine 200mg	1,2	814,589	175,805	4.63	55.60
		Nevirapine 50mg/5ml	1,2,Pediatric	41,572	6,769	6.14	73.70
		Stavudine 15mg	1,Pediatric	10,966	5,598	1.96	23.51
		Stavudine 1mg/ml	1,Pediatric	8,910	5,400	1.65	19.80
		Stavudine 20mg	1,Pediatric	8,481	3,927	2.16	25.92
		Stavudine 30mg	1	5,498	2,466	2.23	26.75
		Zidovudine 300mg	1,2	35,200	4,000	8.80	105.60
		Zidovudine 50mg/5ml	1,2,Pediatric	45,360	10,800	4.20	50.40

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
	Cipla	Abacavir 300mg	1,2	5,413	186	29.10	349.20
		Lamivudine 10mg/ml	1,2,Pediatric	54,149	15,127	3.58	42.96
		Lamivudine 150mg	1,2	25,854	7,604	3.40	40.80
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	457,114	41,770	10.94	131.32
		Lamivudine/Stavudine/Nevirapine 150/40/200mg	1	25,183	2,730	9.22	110.69
		Lamivudine/Zidovudine 150/300mg	1,2	112,500	9,000	12.50	150.00
		Lamivudine/Zidovudine/Nevirapine 150/300/200mg	1	315,000	18,000	17.50	210.00
		Zidovudine 50mg/5ml	1,2,Pediatric	7,526	8,960	0.84	10.08
	Ranbaxy	Efavirenz 200mg	1,2	5,662	298	19.00	228.00
		Lamivudine 150mg	1,2	126,873	25,249	5.02	60.30
		Nevirapine 200mg	1,2	142,627	22,945	6.22	74.59
		Zidovudine 300mg	1,2	47,731	4,025	11.86	142.30
	Strides	Efavirenz 600mg	1,2	179,000	10,000	17.90	214.80
		Lamivudine/Zidovudine/Nevirapine 150/300/200mg	1	430,000	25,000	17.20	206.40
		Nevirapine 200mg	1,2	117,587	30,349	3.87	46.49
		Stavudine 30mg	1	46,520	19,000	2.45	29.38
	Total Generic			8,032,168	780,504		
	Abbott	Aluvia 200/50mg	2	1,464,093	35,119	41.69	500.27
		Kaletra 133.3/33.3mg	2	209,872	4,603	45.59	547.13
		Kaletra 80/20mg/ml	2,Pediatric	64,926	1,522	42.66	511.90
		Norvir 100mg	2	7,425	171	43.42	521.06
	Aspen	Truvada 300/200mg	1,2	836,639	31,857	26.26	315.15
		Viread 300mg	1,2	1,885	96	19.64	235.68
	BMS	Videx 100mg	2	12,868	948	13.57	162.89
		Videx 200mg	2	51,195	1,894	27.03	324.36
		Videx 250mg	2	27,057	1,450	18.66	223.92
		Videx 25mg	2	6,579	861	7.64	91.70
		Videx 400mg	2	37,830	1,554	24.34	292.12
		Videx 50mg	2,Pediatric	7,917	767	10.32	123.86
		Zerit 15mg	1,Pediatric	24,978	4,725	5.29	63.44
		Zerit 1mg/ml	1,Pediatric	9,256	5,584	1.66	19.89
		Zerit 20mg	1,Pediatric	40,754	5,852	6.96	83.57
		Zerit 30mg	1	418,838	95,003	4.41	52.90
		Zerit 40mg	1	42,003	8,565	4.90	58.85

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
	Boehringer	Viramune 200mg	1,2	488,090	12,075	40.42	485.06
		Viramune 50mg/5ml	1,2,Pediatric	247,821	11,318	21.90	262.75
	Gilead	Truvada 300/200mg	1	1,056,660	39,403	26.82	321.80
		Viread 300mg	1,2	73,920	3,827	19.32	231.78
	Glaxo	Combivir 150/300mg	1,2	1,203,596	53,890	22.33	268.01
		Epivir 10mg/ml	1,2,Pediatric	57,508	7,163	8.03	96.34
		Epivir 150mg	1,2	534,420	82,183	6.50	78.03
		Retrovir 100mg	1,2,Pediatric	93,869	5,195	18.07	216.83
		Retrovir 300mg	1,2	141,003	7,074	19.93	239.19
		Retrovir 50mg/5ml	1,2,Pediatric	66,618	8,113	8.21	98.54
		Trizivir 150/300/300mg	1,2	4,028	33	122.06	1,464.77
		Ziagen 20mg/ml	1,2,Pediatric	35,231	918	38.38	460.54
		Ziagen 300mg	1,2	75,536	883	85.54	1,026.54
	Hoffman	Invirase 500mg	2	50,244	624	80.52	966.24
		Viracept 250mg	2	18,483	235	78.65	943.83
	Merck	Atripla 600/200/300mg	1	254,799	4,981	51.15	613.85
		Crixivan 400mg	2	2,017	36	56.02	672.20
		Stocrin 100mg	1,2	644	83	7.76	93.12
		Stocrin 200mg	1,2	169,276	4,671	36.24	434.88
		Stocrin 30mg/ml	1,2,Pediatric	24,353	1,258	19.36	232.30
		Stocrin 50mg	1,2,Pediatric	33,261	8,661	3.84	46.08
		Stocrin 600mg	1,2	2,322,725	99,162	23.42	281.08
		Total Innovator		10,218,218	552,357		
		Total		**18,250,386**	**1,332,861**		
Vietnam	Aurobindo	Abacavir 300mg	1,2	75,335	1,700	44.31	531.78
		Didanosine 100mg	2	17,850	1,700	10.50	126.00
		Efavirenz 600mg	1,2	641,525	38,300	16.75	201.00
		Nevirapine 50mg/5ml	1,2,Pediatric	6,200	1,000	6.20	74.40
		Stavudine 1mg/ml	1,Pediatric	1,450	1,000	1.45	17.40
		Zidovudine 50mg/5ml	1,2,Pediatric	5,050	1,000	5.05	60.60
	Cipla	Lamivudine 10mg/ml	1,2,Pediatric	2,440	1,000	2.44	29.28
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	900,000	120,000	7.50	90.00
		Lamivudine/Zidovudine 150/300mg	1,2	276,100	25,100	11.00	132.00

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
	Ranbaxy	Lamivudine 150mg	1,2	329,640	98,400	3.35	40.20
		Zidovudine 300mg	1,2	1,084	100	10.84	130.08
	Strides	Nevirapine 200mg	1,2	282,200	83,000	3.40	40.80
		Stavudine 30mg	1	144,205	95,500	1.51	18.12
	Total Generic			2,683,079	467,800		
	Abbott	Aluvia 200/50mg	2	485,252	4,320	112.33	1,347.92
		Kaletra 80/20mg/ml	2,Pediatric	16,440	200	82.20	986.40
	BMS	Videx 25mg	2,Pediatric	19,600	2,800	7.00	84.00
	Gilead	Viread 300mg	1,2	32,300	1,900	17.00	204.00
	Hoffman	Viracept 250mg	2	32,200	200	161.00	1,932.00
	Total Innovator			585,792	9,420		
	Total			**3,268,871**	**477,220**		
Zambia	Aurobindo	Abacavir 20mg/ml	1,2,Pediatric	114,320	5,685	20.11	241.31
		Abacavir 300mg	1,2	739,956	20,739	35.68	428.15
		Didanosine 100mg	2	15,675	1,500	10.45	125.40
		Efavirenz 200mg	1,2	75,264	4,500	16.73	200.70
		Efavirenz 600mg	1,2	3,844,504	232,651	16.52	198.30
		Lamivudine 150mg	1,2	91,200	30,000	3.04	36.48
		Lamivudine/Zidovudine 150/300mg	1,2	3,705,835	320,391	11.57	138.80
		Nevirapine 200mg	1,2	1,100,326	303,560	3.62	43.50
		Nevirapine 50mg/5ml	1,2,Pediatric	65,869	10,624	6.20	74.40
		Stavudine 1mg/ml	1,Pediatric	17,545	12,100	1.45	17.40
		Stavudine 20mg	1,Pediatric	1,958	1,119	1.75	21.00
		Zidovudine 100mg	1,2,Pediatric	15,084	900	16.76	201.12
		Zidovudine 300mg	1,2	101,223	12,420	8.15	97.80
	Cipla	Efavirenz 600mg	1,2	1,360,769	69,783	19.50	234.00
		Lamivudine/Stavudine 150/30mg	1	39,000	2,000	19.50	234.00
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	125,608	16,974	7.40	88.80
		Lamivudine/Zidovudine 150/300mg	1,2	255,591	25,306	10.10	121.20
		Nevirapine 200mg	1,2	46,492	11,830	3.93	47.16
	Ranbaxy	Lamivudine 150mg	1,2	11,036	3,334	3.31	39.72
		Nevirapine 200mg	1,2	155,188	43,470	3.57	42.84
	Total Generic			11,882,441	1,128,886		

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
	Abbott	Aluvia 200/50mg	2	977,605	23,786	41.10	493.20
		Kaletra 133.3/33.3mg	2	85,569	1,950	43.88	526.58
		Kaletra 80/20mg/ml	2,Pediatric	142,679	3,455	41.30	495.55
	Aspen	Truvada 300/200mg	1	27,900	1,000	27.90	334.80
		Viread 300mg	1,2	9,035	500	18.07	216.84
	BMS	Videx 100mg	2	68,952	5,408	12.75	153.00
		Videx 25mg	2	7,000	1,000	7.00	84.00
		Videx 50mg	2,Pediatric	9,500	1,000	9.50	114.00
		Zerit 15mg	1,Pediatric	8,815	1,700	5.19	62.22
		Zerit 20mg	1,Pediatric	11,892	2,000	5.95	71.35
	Boehringer	Viramune 200mg	1,2	121,006	6,597	18.34	220.11
	Gilead	Truvada 300/200mg	1,2	1,147,178	43,702	26.25	315.00
		Viread 300mg	1,2	79,305	4,665	17.00	204.00
	Glaxo	Combivir 150/300mg	1,2	39,000	2,000	19.50	234.00
		Ziagen 300mg	1,2	26,678	480	55.58	666.96
	Hoffman	Viracept 250mg	2	88,295	1,092	80.86	970.28
	Merck	Crixivan 400mg	2	148,541	2,957	50.23	602.80
		Stocrin 200mg	1,2	45,798	1,335	34.31	411.67
		Stocrin 50mg	1,2,Pediatric	5,552	1,600	3.47	41.64
		Stocrin 600mg	1,2	41,460	2,000	20.73	248.76
	Total Innovator			3,091,759	108,227		
	Total			**14,974,200**	**1,237,113**		
Zimbabwe	Aurobindo	Efavirenz 600mg	1,2	325,873	20,050	16.25	195.04
		Lamivudine/Zidovudine 150/300mg	1,2	14,820	1,560	9.50	114.00
		Nevirapine 200mg	1,2	5,978	1,629	3.67	44.04
		Zidovudine 300mg	1,2	9,780	1,200	8.15	97.80
	Cipla	Efavirenz 600mg	1,2	23,101	1,860	12.42	149.04
		Lamivudine/Stavudine 150/30mg	1	20,274	10,137	2.00	24.00
		Lamivudine/Stavudine/Nevirapine 150/30/200mg	1	1,661,152	224,480	7.40	88.80
	Ranbaxy	Lamivudine 150mg	1,2	7,616	2,329	3.27	39.24
		Nevirapine 200mg	1,2	69	14	4.93	59.16

Quantities and Costs of Anti-retroviral Medications Purchased by PEPFAR by Country, FY2007							
Country	Brand Type	Product Name	First or Second Line or Pediatric Formulation	Total Cost (US$)	Total Packages Delivered	Mean Package Price	Estimated per Patient Annual Cost
			(a)	(b)	(c)	(b÷c)	(b÷c×12)
		Nevirapine 50mg/5ml	1,2,Pediatric	1,065	150	7.10	85.20
		Zidovudine 300mg	1,2	36,322	3,665	9.91	118.93
	Total Generic			2,106,050	267,074		
	Abbott	Aluvia 200/50mg	2	16,440	400	41.10	493.20
		Kaletra 133.3/33.3mg	2	10,834	260	41.67	500.04
	BMS	Videx 200mg	2,Pediatric	25,602	1,004	25.50	306.00
		Videx 50mg	2,Pediatric	513	54	9.50	114.00
	Glaxo	Combivir 150/300mg	1,2	3,647	187	19.50	234.00
	Total Innovator			57,036	1,905		
	Total			**2,163,086**	**268,979**		
Grand Total				**131,603,966**	**11,445,264**		