Q&A on Second-Line HIV/AIDS Treatment

Q. What are second-line antiretrovirals? How are they different from first-line ARVs and why do they cost more?

A. Over time, a patient's initial regimen of ARV medications ("first-line" therapy) may start failing to control the level of the HIV virus in the body as the virus develops resistance to the first-line drugs. The likelihood of developing resistance varies greatly between patients. When this occurs, there is a need to switch the patient to a new combination of ARV medications that together comprise "second-line" therapy. One of the drugs typically in "second-line" regimens is a protease inhibitor, a class of ARVs that is not generally included in first-line therapy in developing countries and that is primarily responsible for the efficacy of second-line treatment.

Drugs included in second-line regimens, and particularly protease inhibitors, are typically bigger and more complex than first-line drugs at a molecular level. A number of second-line drugs are also dosed at higher levels, requiring more active ingredient per day of treatment. These features help to explain the greater cost of second-line medicines. Low production volumes also play an important role. There has been little demand for second-line medications in most of the developing world as treatment programs are relatively young and most patients have not begun to encounter treatment failure. The limited demand has prevented manufacturers from achieving volume-based efficiencies and cost savings. Increasing volumes over the coming years will enable further price reductions.

Q. How do you know when first-line therapy has "failed"?

A. World Health Organization (WHO) guidelines identify three approaches to diagnosing failure of first-line regimens: 1) *virologic* failure—meaning that despite treatment, patients have a detectable viral load, defined as HIV in the blood at levels above 400 copies per milliliter; 2) *immunologic* failure—meaning that the strength of the immune system, as measured by the CD4 cell count, begins to decline despite treatment; and 3) *clinical* failure, as evidenced by the progression of HIV disease, including weight loss or the development of TB or other opportunistic infections. Most developing countries do not routinely monitor viral load and therefore rely on either clinical assessment or CD4 counts to determine treatment failure.

Q. What are the most commonly used second-line treatment regimens?

A. Second-line regimens generally consist of two drugs from the nucleoside reverse transcriptase inhibitor (NRTI) class and one from the protease inhibitor (PI) class. The choice of the two NRTIs is based largely on the first-line regimen on which the patient was initially enrolled, as NRTIs are also part of standard first-line therapy and clinical outcomes are generally better when different NRTIs are used in first- and second-line treatment. Because NRTIs are used in both first- and second-line, a given NRTI may be used in first-line therapy for some patients and in second-line therapy for others. At present, the NRTIs most commonly used in second-line therapy are tenofovir (TDF) or didanosine (ddI) combined with either abacavir (ABC) or lamivudine (3TC).

PIs are the most critical component of second-line regimens, and maximizing the effectiveness of the PI is essential to successful treatment. Most PIs are administered in ritonavir-boosted forms, since the active ingredient ritonavir increases the potency and tolerability of PIs and simplifies dosing. There are a range of PIs available, and the choice among PI options is driven by efficacy, side effects, and cost considerations. At present, boosted lopinavir (LPV/r) is the most commonly used PI in the developing world. Boosted atazanavir (ATV+RTV or ATV/r), a newer drug that is very widely used in developed nations and that has the advantage of once-daily dosing, may rapidly become a leading drug in the developing world as it is introduced into the market.

Q. Why are so few people on second-line treatment in developing countries?

A. According to the latest WHO/UNAIDS Progress Report on Universal Access to Treatment, as of the end of 2006 roughly two million people, or 28% of those in need, are receiving ARV treatment in low and middle income countries. CHAI estimates that in 2006 only 80,000 of these two million patients, or 4% of the total, were on second-line therapy.

Several factors account for the relatively low level of second-line treatment. First, and most importantly, the majority of these two million ARV patients began treatment only within the last four years and have not yet experienced treatment failure with their first-line medications. In addition, some studies have indicated that treatment failure rates in Africa have been lower than in other regions, though robust data does not yet exist. The need for second-line regimens is expected to rise significantly across developing countries in coming years as the initial wave of patients reached during the early years of the scale-up of AIDS therapy begins to experience treatment failure. CHAI estimates that nearly half a million people will require second-line treatment in 2010.

In addition to the relatively low need for second-line therapy, the need that does exist has been under-addressed. Weak diagnostic and laboratory capacity in many countries has made it difficult for healthcare workers to diagnose treatment failure promptly. Thus, some patients stay on first-line regimens beyond the point of virologic or immunologic failure, until clinical failure becomes evident. And even where treatment failure is accurately diagnosed, the high cost of second-line medications has led some countries to hesitate in making second-line treatment widely available.

Q. Will more patients on second-line result in the diversion of funding away from patients who need first-line therapy?

A. No – donors and governments are committed to continued and expanded funding for all existing treatment efforts. Treatment providers routinely set enrollment targets based on their capacity constraints, which most frequently include human resources, infrastructure, management capacity, and the ability to identify new patients through counseling and testing or other treatment entry points. Treatment budgets generally assume that a certain proportion of patients will need to shift to second-line treatment over time, and set aside funding for that purpose. Meanwhile, donors providing funding for second-line treatment are taking steps to ensure the 'additionality' of their funding, so that funding for second-line treatment does not displace existing activities.

Q. Apart from reducing prices, how is CHAI helping to ensure sustainable and high-quality second-line treatment?

A. The most effective way to make treatment affordable and sustainable is to minimize the rate at which patients begin to experience treatment failure on first-line drugs. By training healthcare workers to prescribe the most effective first-line regimens, providing hands-on adherence support to patients, and monitoring patients' response to treatment very closely, governments and other treatment providers can maximize the efficacy and duration of first-line therapy. CHAI partners with national governments to help treatment providers to incorporate these approaches.

Effective diagnosis of treatment failure is also a major challenge, especially in the absence of easily accessible CD4 count and viral load testing. Building on the reduced pricing that CHAI has negotiated for these critical diagnostics—with CD4 count tests available at \$3 to \$8 per test and viral load tests at \$25 to \$45—CHAI and other partners are providing extensive technical assistance to help build laboratory capacity and train key laboratory personnel.

Finally, the provision of second-line treatment will depend on effective procurement systems. Beyond price reductions, key changes include revision of national protocols to adopt the best possible second-line regimens as well as improvements to forecasting and supply chain management. CHAI supports these efforts by providing direct technical assistance and by disseminating information to improve transparency of price trends, regulatory approvals, and the entry of new suppliers and products into the market.

Q. Will patents on second-line ARVs be a major barrier to the availability of affordable second-line treatment?

A. Generally, no – for most key drugs in most countries, patents will not represent a significant barrier in the near term. The TRIPS framework strikes a balance between requiring reasonable patent protection to provide R&D incentives for originators and creating flexibility to ensure that developing nations can afford essential medicines. Recognizing this balance, both governments and manufacturers are taking steps to expand access and lower prices in developing countries while preserving the profit margins in the wealthier markets that drive overall returns to R&D investment.

Virtually all second-line drugs are still under patent in high-income countries, yet most second-line drugs in most developing countries are either not under patent or have been licensed voluntarily by originators to enable generic competition. Generic versions of some drugs will not be available in some countries due to patent protection in the country of export or import. This is particularly true in middle-income countries. In these situations, differential pricing by originators helps but does not produce the same level of affordability as generic competition.

Q&A on "Next Generation" First-Line AIDS Treatment

Q. What is "next generation" first-line treatment and why is it increasingly important?

A. The key "next generation" first-line regimens include the same medicines as today's leading first-line regimens except that tenofovir (TDF) or zidovudine (AZT) is used in place of stavudine (d4T). While d4T has until now been a central component of most first-line treatment in developing countries, there is increasing evidence demonstrating that this drug causes significant side effects for patients and produces inferior outcomes to those achieved with TDF or AZT. The WHO has therefore recently recommended that countries using d4T in first-line therapy move toward the use of TDF or AZT instead, and demand for the "next generation" regimens is increasing quickly.

TDF is particularly important due to its excellent safety and efficacy profile together with its once-daily dosing schedule. This dosing schedule makes it possible to provide a one-pill, once-daily treatment regimen based on TDF; lamivudine (3TC) or emtricitabine (FTC); and efavirenz (EFV). Patients are more likely to adhere to this simplified regimen, which in turn leads to reduced drug resistance and improved treatment outcomes.

Q. Why haven't countries adopted these "next generation" first-line combinations earlier?

A. The body of clinical evidence indicating the extent of d4T toxicity and the superior outcomes achieved with TDF or AZT has been growing over the past five years. Not until mid-2006 did the WHO formally change its guidelines to recommend movement away from d4T use in first-line therapy. Even when these guidelines were issued, countries were not in a position to move away from d4T immediately. Before doing so, countries have to change national treatment protocols, use up existing stocks of d4T-based products, and order the newly preferred products from suppliers.

In addition, the higher cost of AZT and TDF has led some countries to delay the shift away from d4T. Further, manufacturers have needed to develop new products, particularly fixed-dose combinations including TDF, and find ways to lower their prices. With the significant price reductions announced today by CHAI, it is expected that the shift towards these "next generation" regimens will accelerate. Several African countries with high HIV/AIDS prevalence have already indicated that they will likely adopt TDF-based first-line regimens in the coming months.

Q. Why do different countries use different treatment regimens? Isn't there international consensus?

A. While the WHO provides detailed guidance on ARV treatment regimens, treatment protocols are adopted individually by developing country governments, which design protocols based on a range of factors, including prices, efficacy, and side effects. These considerations mean that there is no single regimen choice that is recognized internationally as "best practice." However, the WHO treatment guidelines, which are prepared though consultation with international experts, do set forth a range of recommended regimens and principles on which countries can base their decisions.

Q. Will the shift toward more expensive first-line regimens slow down the expansion of access to AIDS treatment?

A. No – donors and governments are committed to continued and expanded funding for all existing treatment efforts. Prices of the "next generation" first-line treatment will continue to fall rapidly in

coming months and years as purchase volumes expand and as manufacturers succeed in addressing key cost reduction challenges, including improved chemistry and sourcing of raw materials. Countries are monitoring these price reductions and making careful decisions about the timing of the shift toward "next generation" first-line regimens so that shift will not create a barrier to further expansion of treatment.

Q. What effect will the emergence of once-a-day ARVs have on the success of AIDS treatment?

A. The introduction of an affordable once-a-day pill for AIDS treatment is expected to have a major impact on treatment success by making it easier for patients to adhere to treatment. Most patients currently on first-line treatment are taking drugs that require two to three pills per day and twice-daily dosing. Adherence to this type of treatment regimen has been encouragingly high, but those patients who struggle to adhere to their prescribed regimens are significantly more prone to develop drug resistance. In light of the high costs of second-line therapy and the relatively limited treatment options beyond second-line drugs, maximum adherence to first-line therapy is an imperative for treatment programs. The availability of a one-pill, once-daily regimen will greatly facilitate this goal.

Q&A on New Antiretroviral Pricing Agreements

Q. How do CHAI's new prices compare to current prices in the market?

A. CHAI's newest agreements include price reductions for 16 ARV formulations. The prices and reductions are detailed in the table below. To determine the degree of reduction, new CHAI ceiling rates are compared to the lowest available prices per market (low income and middle income) listed in several publicly available sources, including analysis of purchases captured in the WHO's Global Price Reporting Mechanism, the lowest generic price reported in Médecins Sans Frontières' "Untangling the Web of Price Reductions," and the access prices cited by originators.

Product	Strength (mg)	CHAI Ceiling Price			Low Income Prices & Reduction									Middle Income Prices & Reduction					
				GPRM LI Average ¹			MSF Lowest Generic ²				Originator Access ³			GPRM L/UMI Average ¹			Originator Access ⁴		
3TC	150	\$	36	\$	55	35%	\$	48	25%	ş	69	48%	\$	96	63%	\$	69	48%	
3TC	300	\$	36		N/A	N/A	\$	56	36%		N/A	N/A		N/A	N/A		N/A	N/A	
AZT	300	\$	96	\$	147	35%	\$	103	7%	\$	\$ 212	55%	\$	216	56%	\$	212	55%	
NVP	200	\$	45	\$	72	38%	\$	52	13%	\$	\$ 432	90%	\$	130	65%	\$	432	90%	
EFV	600	\$	164	\$	243	33%	\$	207	21%	\$	\$ 237	31%	\$	300	45%	\$	657	75%	
ABC	300	\$	331	\$	773	57%	\$	456	27%	ş	636	48%	\$	816	59%	\$	636	48%	
TDF	300	\$	149	\$	211	29%	\$	194	N/A	\$	\$ 207	28%	\$	287	48%	\$	360	59%	
ddI EC	250	\$	156	\$	227	31%	\$	103	N/A	\$	\$ 248	37%	\$	929	83%	\$	772	80%	
ddI EC	400	\$	248	\$	311	20%	\$	132	N/A	\$	320	23%	\$	1,096	77%	\$	1,219	80%	
LPV/r	200+50	\$	695	\$	536	-30%	\$	1,338	N/A	ş	\$ 500	-39%	\$	2,476	72%	\$	1,000	31%	
3TC+AZT	150+300	\$	129	\$	180	28%	\$	134	4%	\$	\$ 237	46%	\$	301	57%	\$	237	46%	
TDF+FTC	300+200	\$	225	\$	689	67%	\$	300	N/A	\$	319	29%	\$	328	31%	\$	552	59%	
TDF+3TC	300+300	\$	179		N/A	N/A	\$	265	N/A	L	N/A	N/A		N/A	N/A		N/A	N/A	
3TC+AZT+NVP	150+300+200	\$	174	\$	217	20%	\$	231	25%		N/A	N/A	\$	331	47%		N/A	N/A	
TDF+FTC+EFV	300+200+600	\$	385		N/A	N/A	\$	527	N/A	\$	613	37%		N/A	N/A	\$	1,033	63%	
TDF+3TC+EFV	300+300+600	\$	339		N/A	N/A		N/A	N/A		N/A	N/A		N/A	N/A		N/A	N/A	

1 Weighted average prices in low income (LI) and lower and upper middle income (L/UMI) countries from WHO Global Price Reporting Mechanism for April 2006 through March 2007
2 Lowest price of a WHO/FDA approved generic (if not approved, lowest price is in gray italics) from MSF's Untangling the Web (September 2006 edition with February 2007 supplement)
3 Lowest access program price from the originator; for BMS, an average price is indicated given different prices in Southern African versus other Sub-Saharan African and low-income countries
4 Lowest published 'second tier' access program price, when available (e.g., Abbott pricing to 44 LI and LMI countries or Merck pricing to medium HDI countries with HIV prevalence <1%)

The average price reduction for the seven formulations of the key second-line ARVs abacavir, didanosine, lopinavir/ritonavir, and tenofovir is 27% for low income countries and 53% for middle countries. These figures represent the mean of the reduction for each of the seven formulations, with the reduction per product based on the comparison of the CHAI ceiling price to the lowest available rate per market. In cases in which the lowest rate is from MSF but of a product that is not approved by the WHO or U.S. FDA, this rate is not used for purposes of comparison (e.g., ddI EC).

The key price reduction for "next generation" first-line treatment is based on the fixed-dose combination of tenofovir (TDF), lamivudine (3TC) and efavirenz (EFV). The price reduction of 45% for low income countries and 67% for middle income countries is based on the comparison of the CHAI ceiling price to the originator pricing for the fixed-dose combination of TDF, EFV and emtricitabine (FTC). 300mg of 3TC dosed once-daily is regarded as a clinically equivalent alternative to FTC, and WHO treatment guidelines, noting this, have stated that developing countries only need to stock either 3TC or FTC, not both.

The price reductions are generally greater for middle income countries because, to date, most manufacturers have followed a tiered pricing structure that includes higher prices for wealthier countries (as defined by the World Bank's country income index or the Human Development Index). The principal companies involved in the agreements announced today, Cipla and Matrix, have agreed to extend the reduced prices to all 66 countries in the CHAI Procurement Consortium.

Q. How did CHAI work with suppliers to reduce prices?

A. CHAI has been providing cost reduction assistance to partner suppliers for more than a year, helping to secure lower prices on key raw materials, addressing important chemistry challenges, and modeling volume-based cost savings in anticipation of increased demand.

CHAI's partnership with UNITAID to purchase and provide second-line ARVs to 27 countries is built on this cost reduction approach by providing guaranteed purchase volumes to suppliers and creating a competitive bidding process for participation in the program. Acting on behalf of UNITAID, CHAI issued a formal expression of interest to all manufacturers producing the relevant ARVs, requesting that they indicate the regulatory status of each product they wished to supply and their ability to supply products to each UNITAID beneficiary country. Suppliers were also asked to either indicate the price at which they would provide the product or indicate their willingness to engage in transparent "cost-plus" price negotiations with CHAI. CHAI then began in-depth conversations with those suppliers willing to engage in these negotiations, reviewing their production cost structures and identifying potential cost reduction opportunities. The prices generated through these negotiations were then compared to those submitted by other suppliers to determine the pool of manufacturers eligible for the UNITAID program.

Q. Are there any hidden or additional costs that purchasers will need to pay?

A. In general, CHAI prices are ceiling rates at or below the rates at which CHAI partner suppliers must quote in response to tenders. The ceiling prices themselves are in "Free on Board" (FOB) terms, meaning that they do not include applicable shipping and handling charges from the point of export. It is common for the prices of ARVs to be reported on an FOB basis. Shipping and handling fees add to the FOB price of a product. In addition, some purchasers choose to use procurement agents such as UNICEF, IDA or Crown Agents, which typically adds 5-10% to the price. These costs are not particular to products and prices offered under CHAI agreements.

Q. Will CHAI procure these products? Will others be able to procure these products at the negotiated prices?

A. Yes, for second-line ARVs – CHAI will manage the procurement of UNITAID-financed volumes of these formulations for 27 countries in 2007-08. For these countries, CHAI will contract with an experienced procurement agent to ensure the timely ordering and delivery of these ARVs so that they can be effectively integrated into the national treatment programs of the beneficiary countries.

In addition to the countries benefiting from the UNITAID second-line treatment program, all countries in the CHAI Procurement Consortium, which currently includes 66 nations, will be able to purchase the full range of products included in the current agreements at the negotiated prices. Procurement of the products will be the responsibility of each government using its existing procurement systems and either domestic resources or funds from donors such as the Global Fund.

Q. Why is CHAI working with these specific companies? Is CHAI limiting competition by not working with others?

A. CHAI welcomes the opportunity to partner with other manufacturers, including originators, for second-line formulations and other products. Pricing under CHAI agreements requires suppliers to treat the market of developing countries as a low-margin, high-volume business. Suppliers like Cipla and Matrix, who partner with CHAI, agree to take a "cost-plus" approach, whereby they agree to price on the basis of an agreed production cost structure plus a reasonable profit margin. This approach makes possible the price reductions announced today while ensuring that Cipla and Matrix will earn a healthy and sustainable profit on sales of these products.

Other CHAI partners, including Aspen, Ranbaxy and Strides, have not collaborated on a "cost-plus" basis for these products but remain partners to CHAI in the supply of other ARVs, consistent with prior agreements. Also, CHAI will not be limiting the supply of formulations under its UNITAID-financed second-line program only to Cipla and Matrix. CHAI also expects to purchase second-line ARVs from Abbott, Bristol-Myers Squibb, Gilead, Ranbaxy and others, based on responses to its invitation and the product requirements of UNITAID beneficiaries.

Q. How do CHAI and UNITAID ensure that the products they support are of high quality?

A. All of the products included in today's announcement have either been approved by or submitted to a stringent regulatory authority such as the WHO or U.S. FDA, or will be submitted to these authorities in the next few months. Submissions to the WHO or FDA include data establishing bioequivalence of the generic medicines to originator products, based on tests by research laboratories that have been successfully audited by the WHO and/or FDA.

For those products which are being procured with UNITAID funds that have not yet received final regulatory approval, additional conditions have been applied consistent with the quality assurance policy adopted by the UNITAID board. These conditions include certification that the facilities where the drugs are produced meet the international standard of Good Manufacturing Practice and submission of a complete regulatory dossier to the WHO or other stringent regulatory authority.

CHAI will also ensure that all products supplied through its partnership with UNITAID are of high quality through a comprehensive quality control process. This will include inspecting shipments to ensure that they meet the required specifications and testing random samples of product batches in independent labs to ensure that the chemical composition of the drugs match these specifications.

Q. How do reduced prices improve the quality of care?

A. Reduced prices enable countries to use products with preferred clinical outcomes that may have previously been inaccessible due to high costs. For example, many countries have been reluctant to switch from stavudine-based first-line regimens, which are associated with higher levels of toxicity, because of the cost of alternative tenofovir-based regimens.

In addition, the high cost of second-line therapy has discouraged some countries from prioritizing the provision of these drugs to patients who experience treatment failure. It is expected that the lower prices for second-line ARVs achieved through the partnership between CHAI and UNITAID will enable countries to devote more attention and resources to this area, which is critical for sustaining the quality of care for patients.

Q&A on UNITAID and its Partnership with CHAI

Q. What is UNITAID?

A. UNITAID is a newly formed global health initiative that provides financing for drugs and diagnostics used to treat HIV/AIDS, malaria and tuberculosis. These funds come largely from a sustainable and innovative source: an airline ticket levy. UNITAID is implementing targeted programs to catalyze changes in the marketplace for key commodities in the three disease areas, in order to improve access to those commodities among patients in need across the developing world.

Q. How is UNITAID funded? Who are its major donors?

A. Funding to UNITAID is provided by commitments from a set of governments that have adopted innovative financing mechanisms. France led the creation of UNITAID with the adoption of a levy on airline tickets that went into effect on July 1,2006. This mechanism is expected to raise approximately €200 million in 2007. Brazil, Chile, Norway and the United Kingdom are the other founding donors. As of May 2007, nearly 30 additional countries have joined or committed to join UNITAID, more than half of these being countries on the African continent.

Q. What is UNITAID using its money to support?

A. For each disease area, UNITAID has selected specific niche areas where it will focus resources and programmatic efforts, through a lead implementation partner. For HIV/AIDS, this includes pediatric and second-line treatment, in partnership with CHAI, and prevention of mother to child transmission, in partnership with UNICEF and WHO. UNITAID is also funding programs supplying artemisinin-based combination treatment (ACT) for malaria, pediatric treatment of TB, and treatment of multi-drug resistant (MDR) TB. In addition, UNITAID has pledged financial support to the WHO Prequalification Program that evaluates the safety, efficacy and quality of medicines.

Q. How are CHAI and UNITAID working together on second-line HIV/AIDS treatment?

A. CHAI is the lead implementation partner for the UNITAID second-line HIV/AIDS treatment program. 27 countries will receive a free supply of products from UNITAID for 18 months, after which the reduced prices achieved through the program will enable other funding sources, such as the Global Fund and PEPFAR, to purchase second-line medicines at significantly lower prices. CHAI is using the resources of UNITAID to negotiate the prices of second-line ARVs and to manage the procurement and delivery of the products by working with beneficiary governments.

Q. How was UNITAID involved in the new second-line pricing agreements?

A. CHAI's price negotiations with suppliers were based on the commitment of funds by UNITAID to purchase large volumes of second-line ARV formulations. Part of UNITAID's philosophy is to use available funding to effect changes in the marketplace for key commodities in the three disease areas, particularly in specific markets where volumes have been small and prices high. CHAI was able to leverage the funding available from UNITAID to effect price reductions, which reflect cost savings that will be possible as a result of the larger and more predictable product volumes.

Q&A on the Clinton Foundation HIV/AIDS Initiative (CHAI)

Q. Who has accessed CHAI drug prices under its previous agreements?

A. As of May 2007, over 750,000 people living with HIV are benefiting from medicines purchased under CHAI agreements, following purchases made by over 50 countries.

In October 2003, January 2004, April 2005, January 2006 and November 2006, President Clinton announced successive agreements to lower the prices of the most common antiretrovirals (ARVs) and diagnostics used in HIV/AIDS care and treatment. Initially, CHAI-negotiated prices were available to the dozen countries in Africa and the Caribbean where the Clinton Foundation was working. Beginning in 2004, access was extended to additional countries, on a case-by-case basis based on commitment to principles of sound procurement. Membership in the CHAI Procurement Consortium has expanded to 66 countries in Africa, Asia, Latin America and the Caribbean.

In addition to these direct beneficiaries, many more people have indirectly benefited from the actions of CHAI partner suppliers. By offering drugs and diagnostics for lower prices, they stimulated greater competition in the marketplace, which resulted in lower prices. The credit for the patients on treatment today in developing countries belongs to people in these countries – from Ministers of Health to countless community health workers. The role of donors and international organizations like CHAI is to support their efforts.

Q. What has been required of countries buying at these prices?

A. CHAI purchasers agree to prompt and secure payment terms, and they regularly update and share demand forecasts. In addition, they commit to principles of sound procurement, typically reflected in a memorandum of understanding (MOU) with the Clinton Foundation. These include aggregated national orders; reliance on international quality standards like prequalification by the WHO or U.S. FDA approval; expedited national registration based on those standards; secure distribution of product in country (to avoid leakage into high-income markets); compliance with national and international law protecting intellectual property; and movement towards using multi-year tenders and splitting high-volume orders across multiple suppliers.

The procurement process is not cumbersome. National governments maintain autonomy over the procurement process, and CHAI agreements support the practices and preferences of Procurement Consortium members.

Q. Is CHAI planning to further expand its drug and diagnostic pricing agreements?

A. Lowering the cost of second-line ARVs is a major priority for CHAI and its partnership with UNITAID, and it expects to expand its agreements to lower prices further and include additional products. Outside of HIV/AIDS, CHAI is committed to supporting the supply of artemisinin-based combination treatment (ACT) to treat malaria, and it will be launching an effort aimed at lowering the price being paid by ACT by patients. CHAI also intends to expand its agreements to include other diagnostic products critical to high quality HIV/AIDS care and treatment such as chemistry and hematology tests.

Q. What progress has been made on the pediatric initiative announced in April 2005?

A. In the 18 months following April 2006, 16,000 children were reached with treatment as a result of CHAI's work with government partners. Between November 2006 and February 2007, 12,000 additional children were enrolled on treatment through CHAI's partnership with UNITAID. CHAI's work has helped reduce the prices of pediatric formulations globally, most recently with additional price reductions of 45% for 19 pediatric formulations, which include child-friendly FDCs available for less than \$60 annually (announced in November 2006). In addition, the initiative has helped create national pediatric scale-up plans in multiple countries, has supported pediatric-focused training of physicians and nurses, and has donated large volumes of pediatric medicines. With the support of UNITAID, CHAI is now supporting pediatric treatment programs in 40 countries and is procuring the drugs and diagnostics needed to treat an additional 100,000 children in 2007.

Q. In addition to its procurement work, what else does CHAI do?

A. The Clinton Foundation began its work in 2002, responding to requests by national governments in Africa and the Caribbean to develop detailed operational plans for the scale-up of HIV/AIDS treatment and to make treatment more affordable. CHAI set out to be responsive to national leadership and fill gaps in the provision of technical assistance from traditional organizations in the HIV/AIDS community. Initially, we assisted governments in developing national strategies and business plans for scale-up of care and treatment, and helped to get these plans funded through outreach the international donor community. As these plans were developed, adopted, funded and implemented, CHAI's role has evolved into providing targeted assistance to address challenges that governments face as they attempt to make treatment more broadly available.

Q. How many people work for CHAI? Where is it based? How does it support its work?

A. CHAI relies on hundreds of part-time and full-time volunteers and paid staff. There are presently more than 550 people in developing countries and the U.S. working for CHAI. CHAI is headquartered in Quincy, MA. Ira C. Magaziner serves as Chairman of the Initiative.

The work of CHAI depends largely on private financial contributions as well as the time donated by volunteers and pro bono contributions from various organizations and partners.