

# Health Worker Shortages Challenge PEPFAR Options for Strengthening Health Systems

A Report of the Task Force on HIV/AIDS  
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# Health Worker Shortages Challenge PEPFAR Options for Strengthening Health Systems

*Allen Moore and J. Stephen Morrison*

## Introduction

When the President's Emergency Program for AIDS Relief (PEPFAR) was launched in 2003, Congress overtly recognized the well-documented fact that the physical and human infrastructures essential to achieve the program's ambitious goals in select HIV/AIDS-affected countries were deficient and that special steps would be warranted.

The *United States Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003* (PL 108-25):

- Affirmed the need for “the strengthening of health care delivery systems and infrastructure”;
- Required a five-year strategy that includes:
  - “training (particularly of health care workers),” and
  - “incentives and programs...to stabilize health institutions by encouraging critical personnel to remain in their home countries”;
- Required spending on:
  - “assistance to establish and implement programs to strengthen and broaden indigenous health care delivery systems and the capacity of such systems...including clinical training,” and
  - “improved infrastructure and institutional capacity to develop and manage education, prevention, and treatment programs, including training...”; and
- Required an annual report that details “the progress made toward improving health care delivery systems (including the training of adequate numbers of staff) and infrastructure to ensure increased access to care and treatment.”

By definition, PEPFAR's core mission is quite vertical or narrow—to expand delivery of HIV/AIDS treatment, care, and prevention services. Its mission is not

the wholesale reform or strengthening of health systems. Yet in practice the line between the two is not sharply drawn.

For instance, the Global AIDS Coordinator (the “coordinator”) reports that PEPFAR spent over \$350 million in 2006 on health care worker recruitment, training, retraining, management, and compensation. The coordinator estimates that as much as 70 percent of the funds spent on treatment, the largest category of PEPFAR spending, goes to health systems development in some form, directly or indirectly, though that claim has not been substantiated in any systematic way. In PEPFAR’s next five-year phase, as the program transitions from an “emergency response” to long-term “sustainability,” a key question for policymakers will be whether, how, and to what extent PEPFAR should commit to doing more in the next five-year phase to achieve specific objectives relating to health workforce and health systems needs.

Strengthening the health workforce was emphasized as a key element for sustainability in the Institute of Medicine’s 2007 review of PEPFAR: *PEPFAR Implementation: Progress and Promise*. The Institute of Medicine (IOM) Committee acknowledged a serious gap in the health workforce in PEPFAR focus countries and recommended that to meet existing and future targets for prevention, treatment, and care, “the U.S. Global AIDS Initiative should increase the support available to expand workforce capacity in heavily afflicted countries” and should include the “education of new health workers in addition to AIDS-related training for existing health care workers.” (Recommendation 8-3, IOM Committee for the Evaluation of PEPFAR Implementation, 2007.)

The issue of health workforce shortages is also the subject of increasing attention in the Congress. Senator Richard Durbin (D-IL) and others have introduced the *African Health Capacity Investment Act of 2007* (S. 805), a bill requiring the president to develop “a strategy for coordinating, implementing, and monitoring assistance programs for human health care capacity in sub-Saharan Africa.” S. 805 was reported out (i.e., endorsed) by the Senate Foreign Relations Committee on September 11, 2007. A companion bill is expected to be introduced in the House by Representative Barbara Lee (D-CA).

This report first reviews the policy and programmatic challenges of weak health systems, health care worker shortages, and related issues in HIV/AIDS-affected countries, and concludes by outlining three key options for strengthening health systems during PEPFAR’s next five-year phase.

## **Weak Health Systems Limited PEPFAR’s Options**

Most countries suffering from high HIV prevalence have weak and poorly resourced health systems, especially in sub-Saharan Africa and South Asia. Typically, these countries have poor health indicators:

- High infant and early childhood mortality
- High maternal death rates and complications from pregnancy and childbirth
- High rates of infectious disease, including malaria in some countries

- High rates of inadequate nutrition
- Widespread shortages of safe drinking water and sanitation

Most poor countries rely on government-run public health systems, supplemented by hospitals and clinics financed by international charities that are both secular and faith based. Larger cities may also have private health facilities that are available to the wealthiest members of society but not easily accessible to the poor. As is the case in many developed countries, uneven distribution of health resources can be a dire problem. Urban areas have more hospitals, clinics, and personnel, by comparison with rural and slum areas.

As HIV/AIDS began its deadly march across much of sub-Saharan Africa, weak and inadequate health systems were often already overstretched. The steep increase in international resources that suddenly became available this decade with the advent of PEPFAR; the Global Fund to Fight HIV/AIDS, TB, and Malaria; the World Bank; and bilateral donor programs exposed health system weaknesses and raised the dual question of whether there was sufficient capacity within existing African institutions to absorb these new resources quickly and effectively and whether donors would need to give high priority to addressing health workforce and other health system deficiencies.

To illustrate: PEPFAR made a historic commitment to put at least 2 million people on antiretroviral (ARV) treatment over five years, at a time when only about 50,000 people were receiving such treatment in all of Africa. At the time the commitment was made, there were multiple obstacles to success, seen in varying degrees in each of the PEPFAR's 15 focus countries:

- Limited affordable drugs available in effective combinations that made practical sense for persons in poor health, without clean water, and without adequate nutrition;
- Limited effective means of testing for HIV infection, much less for the more sophisticated testing needed to determine whether a person's infection had advanced to the state of needing drug therapy;
- Limited logistical systems for purchasing, shipping, securing, storing, and distributing drugs and related medicines once patients in need were identified;
- Limited trained workforce available to test for infection, counsel those in need of drugs, administer the drugs, and monitor the treatment; and
- Limited flexibility in outdated work rules that require doctors to perform diagnostic and treatment functions that could more efficiently be carried out by nurses or other medically trained persons, including community health workers trained to perform specific tasks.

These severe shortcomings in health systems placed fundamental constraints on PEPFAR officials in the Office of the Global AIDS Coordinator (OGAC) charged with responding to the crisis. As a result, they took several early steps to assist in meeting these challenges:

- Deputize the embassies to develop and help carry out country-specific implementation plans for HIV/AIDS program scale-up;
- Develop those plans in close consultation with host governments;
- Rely heavily at the outset on outside contractors to get the programs up and running through the early stages; and
- Maintain a level of flexibility to respond to constantly changing realities on the ground such as improved knowledge, new interventions, the response by local governments, and the actions of other donors. This flexibility has prompted OGAC increasingly to expand the menu of services to some of those in need, particularly mothers, newborns, orphans, and vulnerable children.

All these decisions presumed that existing health systems, including the health care workforce, were inadequate to the task without considerable additional external investments, though that shortfall was not analyzed or captured systematically in planning documents in the rush to start up the PEPFAR programs. Notwithstanding these daunting challenges, PEPFAR made significant gains, especially in the provision of treatment and care for persons living with HIV/AIDS. According to the 2007 IOM evaluation, PEPFAR's most important early accomplishment has been "to demonstrate that HIV/AIDS services, particularly treatment, can be rapidly scaled up in resource-constrained...countries—something that many had doubted could be done."

But systemic challenges and problems have also abounded in this same period. The 2007 IOM evaluation also notes that "policy makers and field staff in some of the most affected countries cite the lack of human resources for health as the single most serious obstacle to scaling up treatment." PEPFAR's initial "emergency" approach to staffing programs aimed at training *existing* clinicians and health workers. Efforts to expand the workforce through the training of *additional* health professionals were relatively minimal, and the IOM Committee cites confusion among many country teams about whether certain activities, including the training of new clinicians, were allowed to be funded with PEPFAR money.

While the explosive growth in resources is universally welcomed, the focus on HIV/AIDS (and, to a lesser degree, TB and malaria) has clearly been a mixed blessing for health systems in the targeted countries. Since PEPFAR is not intended to be a perpetual source of foreign assistance to individual countries, it is critically important that a high priority be placed on making steady progress toward "sustainable" programs built on strengthened health systems.

### **The Special Challenge of Health Worker Shortages**

The problems of health system failures and worker shortages have long been present in the developing world, but the extent of those shortages did not receive widespread attention until the rapid increase of spending on HIV/AIDS, TB, and malaria added significant new stress to already marginal systems. Subsequently,

the World Health Organization (WHO), the Joint Learning Initiative on Human Resources for Health and Development, the Working Group on Global Health Partnerships for the Health Millennium Development Goals, UNAIDS, the IOM, and others have all described aspects of the serious shortages of health workers and general system weaknesses.

The WHO estimates a global shortage of 4 million health workers, including a shortage of 1 million in sub-Saharan Africa, where almost no countries have the 2.3 trained health workers per 1,000 people considered the minimal workforce needed to achieve basic health standards. Medecins Sans Frontieres (MSF) released a study in May 2007 that described the broad but varying scope of the workforce problem in four African countries. Whereas the WHO considers 20 doctors per 100,000 inhabitants as the minimum acceptable standard, MSF reports that Malawi has 2; Mozambique has 2.6; and Lesotho has 5. Relatively wealthy South Africa has 74. (By comparison, the United States has 240.)

When other health providers (i.e., nurses and midwives) are added, Malawi has just 25 percent of the minimum WHO standard, Mozambique has 15 percent, Lesotho has 30 percent, and South Africa has about 200 percent. (The United States has five times the minimum.) By another measure, the WHO estimates that Africa has 24 percent of the global disease burden but only 3 percent of the world's health workers. These figures do not reflect other insidious aspects of the shortages: poor distribution of resources within countries, absenteeism, and mismanagement.

There are many reasons for these chronic shortages:

- *Poor pay and benefits.* This problem is common, as is the related problem of delayed or nonpayment of salary. The MSF survey showed that nearly three-quarters of Lesotho's nurses may leave the profession in order to achieve higher earnings. Poor pay also leads to absenteeism as workers seek to supplement their incomes elsewhere.
- *Poor working and living conditions.* Inadequate facilities; lack of medicines, supplies, and equipment; and the absence of clean water and reliable electricity make it difficult to recruit and retain workers. Poor working conditions are often accompanied by housing and living conditions unacceptable to trained medical professionals.
- *High health risks.* Health workers are highly vulnerable to infection and illness due to exposure risk, shortages of the supplies and training to create safe working conditions, and the lack of effective treatment. Health workers have also been hard hit by HIV/AIDS. In high HIV-prevalence countries, AIDS is often the leading cause of health worker attrition.
- *Outmoded work rules.* Many developing countries have rules that prohibit the most productive and efficient use of workers by requiring that physicians or nurses perform tasks that could easily be carried out by trained community health workers. The Global AIDS Coordinator believes that modernized work rules permitting "task shifting" to nurses or lay workers could increase productivity by 30 percent or more.

- *“Brain drain.”* Geographic migration is driven by low pay and poor working and living conditions, but much of the migration is within countries or across nearby borders. International migration to wealthy countries also appears to be a growing trend, though an unknown number of highly trained persons are economic migrants, who are not able to gain certification as doctors or nurses, but work in related fields. Migration to wealthy countries threatens to increase with the growing demand for health workers brought about by aging populations.
- *Inadequate development of new health workers.* Few poor countries have the capacity to train all the health professionals they need, much less to retain them. Developed countries, too, are not training enough health professional to meet their needs. This is certainly true in the United States.
- *Low government priority given to public health.* Most poor countries have very limited resources and spend less than 10 percent of their national budgets on their national health systems. The distribution of these scarce resources also tends to be skewed toward urban areas. Though most African nations made an international commitment to increase health spending to at least 15 percent of their national budgets, only two or three are on a path to reach that goal.
- *Restrictions imposed by international financial institutions.* This issue continues to generate controversy and confusion. Restrictions or pressures imposed by the IMF on public spending can have the effect of limiting spending on health and the hiring of new health workers. The IMF maintains that policy changes in recent years have all but eliminated such unintended consequences.

## PEPFAR’s Impact on Health Systems and Health Workers

The additional billions of dollars for HIV/AIDS provided by PEPFAR (along with billions more for HIV/AIDS, TB, and malaria from the Global Fund, other donors, and recipient countries) have dramatic impacts on health systems, health workers, and health outcomes—both positive and negative.

Positive impacts include:

- *Increased resources for training, paying, and protecting the health of workers.* OGAC estimates that in 2006 it spent over \$350 million on health workforce development in the 15 PEPFAR countries. The United States also invested significant resources on workforce capacity building in the other 80-plus countries that receive U.S. government HIV/AIDS funds. In 2005, PEPFAR funds were used to train or retrain more than 500,000 service providers. PEPFAR’s salary supplements have improved worker retention. And PEPFAR’s investments in safe blood transfusions and injections have improved worker safety.
- *Increased resources for health systems.* Large amounts of PEPFAR and U.S. Agency for International Development (USAID) funds are used to improve

facilities, construct “supply chains” for medicines and diagnostic supplies, purchase necessary equipment, create information systems, and build management competency. Although the heaviest focus is on health system needs related to HIV/AIDS, there is a potential for external benefits that strengthen health systems more broadly.

- *PEPFAR’s size makes it a major force for change.* PEPFAR is often one of the largest, if not the largest, source of health spending in a particular country. It has the opportunity and the duty to work with other internal and external funders to coordinate programs and priorities. It can play a major role in reforming restrictive policies that prohibit “task shifting,” thus improving the ability to recruit and train community health workers—including persons living with HIV/AIDS (PLWHA)—to perform diagnostic, counseling, education, and palliative care functions. PEPFAR can also support expanded partnerships with other institutions within countries and across borders, including “twinning” partnerships between U.S. universities and local institutions.
- *PEPFAR’s programs can improve related health outcomes with integrated operations.* Programs to prevent mother-to-child transmission of HIV (PMTCT) increasingly include prenatal, childbirth, and postnatal care with health benefits beyond HIV prevention. Reproductive health services can also be added to PMTCT programs. Programs for orphans and vulnerable children (OVC) are beginning to include vaccinations, immunizations, and basic nutrition services. PEPFAR is also developing linkages to malaria programs funded by the President’s Malaria Initiative (PMI) to expand benefits for women and children.

Negative impacts include:

- *Redistribution of medical professionals.* New spending on HIV/AIDS, TB, and malaria means that program managers on the ground will hire existing health care workers. Absent a simultaneous increase in the supply of workers, the new programs will be forced to displace skilled workers from their previous positions at least until additional workers can be recruited and trained or retrained.
- *Redistribution of other health system workers.* Effective health programs require many types of expertise: laboratory operations, pharmacy, information systems, finance, human resources, worker training, drugs and medicine supply management, medical records, equipment maintenance and repair, facilities construction and maintenance, monitoring and evaluation, etc. New programs rich with resources and charged with achieving results immediately will usually hire preexisting skilled workers, at least temporarily.
- *Negative health outcomes for key areas like maternal health, child health, and life expectancy.* Even if there is an increase in the overall level of resources available to a country’s health system, workforce redistribution can have the effect of reducing preexisting capacity in key health areas. Such redistribution could contribute, at least temporarily, to increased death rates for children,

increased death rates for mothers during childbirth, and lowered life expectancies.

- *Worker redistribution may include migration of workers across national borders.* When health spending increases suddenly in one poor country, new workers may be hired from neighboring countries, especially those with similar language and culture.

## Recommendations for PEPFAR Reauthorization

The need to strengthen health systems in high HIV/AIDS-prevalence countries, including the need to build adequate workforce capacity, should be a high priority for PEPFAR's next five-year phase. In this period, PEPFAR will transition from an emergency program that has been very vertically defined with sharp focus on HIV/AIDS treatment and care to a long-term, sustainable program that retains its priority focus on HIV/AIDS but at the same time attends more to workforce and health systems strengthening.

A key challenge for Congress is deciding how specific to be in the reauthorization regarding the scope of future commitments, both programmatic and geographic, in health workforce development and the overall strengthening of health systems. Any expanded requirement will have implications for the expenditure of financial and human resources, both at OGAC headquarters in Washington, D.C., and in the field.

Any changes to the law relating to health workforce and systems policy and programs should embrace several operating principles:

- Decisions should be made in partnership with local governments;
- Program administrators should have considerable flexibility in spending;
- Spending decisions should be based on the best available evidence;
- OGAC should have to report on its plans and results; and
- OGAC should not be held responsible for matters beyond its control.

Congress should give serious consideration to three key options. These options should be considered individually and in combination because they are not mutually exclusive.

**Option 1: Require OGAC to give priority to assuring an adequate workforce and supportive system to achieve a country's HIV/AIDS programmatic objectives, while doing no harm to existing health systems.**

Congress could require actions to assure that there are adequately trained and compensated workers to achieve U.S. program objectives in focus countries without weakening existing health systems, consistent with the objective of long-term sustainability. Developing an effective and detailed health workforce strategy should be the responsibility of the U.S. country team and overseen by the coordinator, who should be required to provide periodic reports on plans, efforts,

and results. Such a requirement could specify a coordinated approach among OGAC, host governments, other U.S. government assistance programs, and other donors. In designing such a requirement and any associated accountability measures, Congress would have to recognize that the coordinator's mandate deals with HIV/AIDS and that it has no control over the other relevant parties, none of whom are likely to have similar health system directives.

**Option 2: Require OGAC to give priority to joining with international partners in developing and promoting rules and legislative frameworks that permit "task shifting," when medically appropriate, away from doctors toward nurses and away from nurses toward community health workers, especially PLWHA.**

Congress could direct the coordinator to become more active and systematic in its work to change existing legal frameworks and inflexible local rules that reduce productivity in the HIV/AIDS sectors and other health sectors as appropriate. This work should be done in partnership with the WHO, UNAIDS, the Global Fund, other respected international public health organizations, local health ministries, and health professionals. The focus should be on assuring the most productive use of scarce medical talent.

**Option 3: Require OGAC to launch pilot programs in one or two PEPFAR focus countries, in cooperation with other key partners, to strengthen national health systems.**

Some advocates argue that in PEPFAR's next phase OGAC should be required to:

- Meet staffing and systems requirements beyond the HIV/AIDS portfolio;
- Set targets for achieving a specific ratio of health workers to population, either on a country basis or within a country;
- Set aside a fixed portion of PEPFAR funds to workforce and systems needs;
- Follow a specific formula for attracting, training, retraining, compensating, and retaining more health workers; or
- Develop a plan to meet health workforce and systems objectives in every country that PEPFAR operates.

Such broad specific requirements are certainly compelling given the scope of unmet health needs and the illogic of building a single vertical disease infrastructure while not attending to the broader health infrastructure context. On the other hand, Congress needs to be cautious in mandating a new approach on health workforce strengthening. Expansive new demands could dilute the program's fundamental charter of fighting HIV/AIDS among the world's poor and vulnerable citizens. The more specific a directive in terms of resources or outcomes, the less flexibility there will be for OGAC to design a program that best fits local needs, local preferences, and the contributions of other donors. The 2007 IOM evaluation recommended that earmarked funding be eliminated from the *Leadership Act* because it interfered with OGAC's ability to respond to local

needs. Furthermore, if OGAC is ordered to achieve results that go outside the bounds of HIV/AIDS, there is a risk that its fundamental mission could be compromised, especially if the new directive consumed significant human or financial resources or held OGAC accountable for the behavior of other players beyond its control.

One pragmatic way forward is for Congress to mandate that OGAC develop a pilot program in one or two PEPFAR focus countries that builds on PEPFAR's "platform" to create a more comprehensive public health system, one which strives for a specific ratio of health care workers to population. Any such experiment will require careful and systematic planning, a cooperative partnership with the national government, and the engagement of other donors and international organizations.

## **Conclusion**

Congress's reauthorization of PEPFAR is an opportune moment for tackling in a serious and systematic way the emerging health workforce and health systems needs in those countries where the United States has already made historic investments and is poised to continue that effort, transitioning from an initial emergency approach to a more long-term sustainable approach. This report has laid out three broad pragmatic options that can form the basis of a robust approach to strengthening health workforces without overburdening demands on OGAC or diluting its core focus. While PEPFAR alone cannot solve the immense health systems challenges that many countries face, it can set an important tone for other donors and affected countries by making the strengthening of health systems a priority in PEPFAR reauthorization.