The President’s Emergency Plan for AIDS Relief

Report on Work Force Capacity and HIV/AIDS

July 2006

Senate Report 109-96, accompanying H.R. 3057, called upon the Office of the United States Global AIDS Coordinator to report as follows:

The Committee directs the Global HIV/AIDS Coordinator to submit a report with the following information with respect to each focus country: a) the additions in health workforce capacity required to meet the goals of the U.S. Leadership Against HIV/AIDS, TB, and Malaria Act of 2003 that are related to disease prevention, care and treatment, without reducing the capacity of the health system to deliver other health interventions and b) the Coordinator’s strategy, developed in consultation with national governments and international donors and organizations, including funding projections, for meeting the shortfall in health workforce capacity.
Executive Summary

An estimated 38.6 million people worldwide were living with HIV/AIDS as of the end of 2005. Over 25 million of them live in resource-poor areas — areas with weak and understaffed health systems. HIV/AIDS places a growing strain on already stressed health care systems and workers in these countries. The challenge of this disease is compounded by the struggle to acquire the capacity, knowledge, and skills to deliver prevention, treatment, and care to all those infected with and affected by HIV/AIDS.

The President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) is committed to supporting the prevention of seven million new infections, treatment for two million people living with HIV, and care for ten million people. Strengthening the health systems and human resources of host governments and non-governmental organizations (NGOs) to reach these goals is a fundamental component of the Emergency Plan strategy. This strategy includes activities to support local capacity building and human resources development for long-term sustainability.

The fight against HIV/AIDS must be sustained and won at the community and national levels. A goal of the Emergency Plan is to ensure a comprehensive and amplified response to global HIV/AIDS through leadership, engagement and coordination with multilateral institutions and international organizations. The support of international partners is of vital importance. Multilateral partners such as the Global Fund to Fight AIDS, Tuberculosis and Malaria must ensure that their support helps communities develop their own human resources and organizational capacity to create and sustain their leadership in the fight.

In Fiscal Year (FY) 2006 nearly $350 million in funds supported network development, human resources and local organizational capacity development, and training. However, systemic weaknesses in areas such as health networks and infrastructure continue to be obstacles to expanding the development of health systems and building human resource capacity in many PEPFAR countries. The Emergency Plan, working with host countries, supports national strategies to strengthen these critical systems. In FY 2005, partners reported that approximately 25 percent of programmatic activities had components that directly supported network development. This focus on strengthening networks provides a base from which to build
institutional and human resource capacity to rapidly expand prevention, care and treatment services.

The Emergency Plan recognizes that quality and sustainability in HIV/AIDS prevention, treatment and care require skilled providers of health services. However, many PEPFAR countries lack the trained health workers necessary to respond to the need. With this in mind, the Emergency Plan and its host country partners support:

- National strategies with innovative approaches to retention;
- Broadening of policies regarding the types of health care workers that can provide HIV/AIDS services; and
- The use of volunteers and twinning relationships to rapidly expand the number of local service providers required to respond to this disease.

The Emergency Plan also supports focused training for the development of human capacity to deliver HIV/AIDS services. In FY 2005, the Emergency Plan supported training or retraining for more than 536,000 service providers. Approximately 267,000 individuals were trained or retrained in the prevention of sexual transmission; 28,600 in prevention of mother to child transmission (PMTCT); 20,300 in prevention of medical transmission; 36,500 to support antiretroviral treatment (ART); 74,800 to care for orphans and vulnerable children; and 86,300 to provide palliative and supportive care for people living with HIV/AIDS (PLWHA).

In addition to training existing health care workers, it is also essential to bring new workers into the health workforce. Training support for long term or pre-service training for new physicians and nurses expands the clinical workforce, but it is expensive and generally takes four to six years to produce skilled health professionals. Support for this type of training is an important part of a comprehensive strategy, but it must be supplemented by efforts to train workers with lower skill levels rapidly.

Policy change to allow task-shifting from more specialized to less specialized health workers is the one human resources for health strategy that will have the most significant and most immediate effect on increasing the pool of health workers to deliver HIV/AIDS services. Changing national and local policies to support task-shifting can foster dramatic progress in expanding access to prevention, treatment and care services. The Emergency Plan works with its host country partners to broaden national policies to
allow trained members of the community -- including people living with HIV/AIDS -- to become part of the clinical team as community health workers.

Training community health workers also helps to address the issue of “brain drain.” Each year in the developing world, substantial numbers of doctors, nurses and other health professionals leave the health care workforce either temporarily or permanently, or migrate out of their home countries to work elsewhere. These trends lead to worker shortages and compromise the delivery and quality of health services.

It is important to note that there is no national or international certification process for community health workers. As a result these workers are less likely to migrate out of their home countries or local communities. Their commitment to their communities fosters a stable health workforce. Continued support and training, however, are critical to retaining these workers’ ability to provide quality HIV care in their communities.

Many of the Emergency Plan countries are unable to efficiently absorb and apply their HIV/AIDS resources. They are assisted in responding to this challenge by PEPFAR support of the implementation of human resources assessments and the development of both short- and long-term national human resource strategies. Support for policy change to allow for task-shifting, recruitment and retention approaches, twinning partnerships, training, and information management systems, are critical components of PEPFAR country strategies. This report identifies innovative approaches the countries are using to address the shortages of health care workers and describes efforts to achieve long-term sustainability.

The challenges issues of health workforce development require an international response, including commitment from multilateral organizations. PEPFAR is working closely with the World Health Organization (WHO) and other international partners to ensure broad support for national efforts to address workforce issues.
**The Extent of the Problem**

A study conducted by USAID in 2003\(^1\) indicates that although the number of trained health workers in Africa has historically been inadequate, recent economic and fiscal difficulties as well as the burden of HIV/AIDS have resulted in severe scarcities in almost every category of health worker. Six of the 15 PEPFAR focus countries in Africa – **Cote d’Ivoire**, Ethiopia, Mozambique, Tanzania, Uganda, and Zambia - do not meet the WHO “Health for All” standard of one medical doctor per 5,000 population; four others - Botswana, Namibia, Nigeria, and South Africa - just meet the standard. Ethiopia has one doctor for every 34,000 people in the country and one nurse for every 4,900. In Mozambique, 600 physicians serve a country of 18 million people. Malawi has one physician for every 7,000 PLWHA.

Access to health workers is unequal among different regions and countries, and shortages are most severe in rural and poor areas. As an example, the geographic maldistribution in Kenya, a country that does have enough doctors, is so great that there may be a 1:5000 ratio in Nairobi while the remote Turkana district has a 1:160,000 ratio. Poor districts in South Africa may have only one doctor per 30,000 population.\(^2\) Vietnam, the only PEPFAR focus country in Asia, averages just over one health service provider per 1000 population, yet 37 of the 61 provinces fall below this national average while one province has almost four service providers per 1000 population.\(^3\)

It is widely acknowledged that the lack of trained health workers is a major barrier to scaling up AIDS services, particularly ART. The UNAIDS Global Steering Committee has ranked this as one of the major obstacles to scaling up the AIDS response.\(^4\) It is also recognized that there are no accurate estimates of the additional health personnel needed to respond to the AIDS crisis. The WHO estimated that there was a need to train an extra 100,000 health workers just to meet the 3x5 three million treatment target.\(^5\) The Joint Learning Initiative on Human Resources for Health and Development (JLI) establishes 2.5 trained health worker per 1,000 as the minimum necessary to achieve minimum health standards in sub-Saharan Africa. It also estimates

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\(^1\) The Health Sector Human Resource Crisis in Africa. USAID 2003
\(^2\) Estimates of Health Personnel, WHO 2002
\(^3\) Working together for health. World Health Report 2006. WHO
\(^4\) UNAIDS Global Steering Committee on Scaling Up towards Universal Access. Issues paper for January 9-10 meeting 2006.
\(^5\) WHO. Progress on Global Access to HIV antiretroviral therapy. December 2005
that Africa currently has approximately one health worker per 1000 population.⁶

According to the WHO, the African region suffers more than 24% of the global burden of disease but has access to only 3% of health workers.⁷ Communicable disease accounts for nearly three-fourths of sub-Saharan Africa’s disease burden and HIV/AIDS alone contributes to nearly one-fifth of the region’s disease burden.⁸ These figures underscore the need to produce more trained health workers and to retain those already providing HIV care and treatment.

The Emergency Plan Response

The United States Government (USG), working in partnership with host nations, is investing significantly in building and strengthening the health workforce and associated systems of developing nations. In the 15 PEPFAR focus countries, the Emergency Plan is estimated to be investing approximately $350 million on health workforce and systems development in 2006 alone (including training, local organization capacity development, human resources, and networks). This investment represents an estimated 25 percent of PEPFAR field-based resources for prevention, treatment and care in the focus countries. In 2005, PEPFAR provided support for training of over 500,000 people in providing various levels of health care.

The USG response to the shortage of health workers is to provide support, within national plans and priorities and the principles of the “3 ones.” Emergency Plan-supported programs include:

- Support for policy reform to promote task-shifting from physicians and nurses to community health workers;
- Development of information systems;
- Human resources assessments;
- Training support for health workers, including community health workers;
- Retention strategies; and
- Twinning partnerships.

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⁸ The Health Sector Human Resource Crisis in Africa: An Issue Paper. USAID. February 2003
**Support for policy reform:** The USG supports activities in the PEPFAR countries that focus on reforming restrictive policies that prevent the use of community health workers and other task-shifting that can enhance a nation’s ability to respond to the challenge of HIV/AIDS. Policy change to support task-shifting can have the most immediate effect on increasing the number of health care workers.

Yet in many nations it remains illegal for non-physicians to refill prescriptions for antiretroviral drugs or for drugs for opportunistic infections. In some countries only nurses can conduct counseling when their scarce time could be better used on clinical tasks.

In Ethiopia, it is estimated that 20 percent of its limited nursing workforce (one nurse for every 4,900 people) is currently doing counseling and testing and then forwarding blood to technicians to do rapid tests. Policy change to support task-shifting would allow trained community health workers to do these tasks and free up that 20 percent of the country’s nurses to provide clinical care.

With PEPFAR support, a number of partners conduct activities that focus on relaxing such policies so that community health workers can fully contribute to the national response to HIV/AIDS.

Some governments have been leaders in developing innovative approaches to enhance human resources for health, and the Emergency Plan is supporting this trend on a broad scale.

The Ministry of Health (MOH) in Mozambique has removed the requirement that only physicians may prescribe antiretroviral drugs (ARVs), allowing other health professionals with appropriate, targeted training to prescribe them. Kenya, Malawi and Ethiopia now allow clinical officers to prescribe ARVs.

In Uganda, lay providers have been trained in cotrimoxazole prophylaxis and other components of the treatment of opportunistic infections (OI) and basic care, including the administration of pain relieving medications, enabling wider distribution for community-based programs. Trained lay people, many of them PLWHA, provide nursing care, deliver ART, tuberculosis (TB), and OI medication refills to clients and monitor their
adherence to these medications. These community health workers are also involved in health promotion, providing condom education and malaria prevention, and other activities previously done by physicians and nurses. The PMTCT policy in Uganda is currently being revised to recommend peer support groups as an integral part of PMTCT interventions as a way of providing psychosocial care and support for the women and their families.

The Government of Rwanda (GOR) has adopted a number of policy changes that expand service delivery by lay or community health workers. The GOR has adopted a pilot program that allows nurses to prescribe ARVs; piloted community-based TB treatment; approved and published policy guidance on community-based malaria treatment; and supported a pilot malaria program. GOR counseling and testing guidelines also include the use of lay counselors.

The Zambian government is considering policy change to expand health worker categories and shift tasks to community health workers as well. With PEPFAR support, Zambia recently drafted a Human Resources for Health Strategic Plan for 2006-2010 which endorses improving overall remuneration and conditions of service for community workers; recruiting retired health workers on contract; expanding existing retention schemes; and improving training school output.

Guyana is currently moving toward permitting community health workers who work in remote and underserved areas to engage in limited aspects of HIV education, screening, care, and support.

**Information systems:** In most of sub-Saharan Africa, workforce data is fragmented, unreliable and inaccurate. As a result, there is a limited evidence base regarding the need for various categories of health personnel. The Emergency Plan is currently investing in strengthening human resources for health information systems in Cote D’Ivoire, Ethiopia, Kenya, Mozambique and Zambia to address this problem.

**Human resource assessments:** The countries of Botswana, Ethiopia, Namibia, Tanzania, Zambia, Malawi and Lesotho are among the PEPFAR countries which have developed human resources assessments, strategies, policies, and/or plans to guide their investments in strengthening human resources for health. The USG is assisting them to document and remove barriers to implementing these plans. Mozambique is conducting a
comprehensive human capacity development assessment to identify strategies to address long-term human resource needs. In Zambia, Kenya and Cote d’Ivoire, local health agency staff members were trained to conduct human resources assessments with the intent of developing a sustainable strategy for preparing human resources plans with USG support.

Training support: Scale-up and sustainability of health care systems to respond to the HIV crisis depend on an investment in training. Nearly $140 million in PEPFAR funding has been committed to training human resources for health thus far in FY 2006. While much of the training support is for in-service training, the USG also supports pre-service training and training of new cadres of health workers, such as community health workers, to free up health professionals for more advanced tasks. In-service training empowers existing health workers, provides opportunities for career development, improves the quality of care, and provides opportunities for clinical mentoring.

All of the PEPFAR countries have significant investments in training or retraining health care providers. Over 500,000 service providers were trained or retrained in FY 2005, including over 36,000 providers trained to support ART. Pre-service training expands the workforce and incorporates HIV/AIDS competencies into the medical and nursing school curriculum. The Emergency Plan supports the development and implementation of curricula in pre-service settings and pre-service training for essential health professionals. The USG is currently finalizing plans with five nursing schools in Rwanda to improve the schools’ training capacity by including curriculum revisions to add HIV/AIDS care, and by upgrading training equipment and reference material.

Training for task-shifting creates job opportunities and frees up doctors, nurses, and other health professionals for more complex tasks. It also allows for the greater involvement of PLWHA and provides a bridge to the community. The Emergency Plan has played a leadership role in training and developing community health workers and other lay health providers. PLWHA are being trained to provide a variety of health services in Botswana, Cote d’Ivoire, Haiti, Kenya, Nigeria, Rwanda, South Africa, Uganda and Zambia.

A formal partnership between the Zambian MOH, the Zambian Network of People Living with HIV/AIDS, and community-based organizations
provides an opportunity for PLWHA to be trained to deliver adherence support and prevention services.

Over 150 PLWHA have been trained so far this year as community health workers in Haiti to provide basic HIV support, treatment adherence and psychosocial support.

In South Africa, the USG is supporting programs to work with PLWHA organizations and train members as community health workers to provide basic care, staff clinics and monitor antiretroviral treatment. Community health workers can also extend the reach of health systems into hard-to-reach populations and communities. A model Regional Training Center (RTC) has been established in the Umtata province using PEPFAR support to fast-track the needed training and support, and to evaluate the prevention and clinical programs. Thus far, 80 doctors, 65 nurse clinicians, and 25 community health workers have been trained there.

In Ethiopia, a country with one doctor per 34,000 people, PEPFAR is supporting the MOH to train 30,000 community health workers for assignment in 15,000 rural areas to serve a population of approximately 5,000 per area.

The Botswana Business Coalition on AIDS is training and placing 280 community workplace counselors with USG support. Task-shifting also allows for nurses and clinical officers to take on tasks formerly reserved only for physicians in countries with severe physician shortages.

As noted above, Mozambique recently removed the requirement that only physicians may prescribe ARVs and now allows other medical professional such as nurses with appropriate, targeted training to prescribe these medications. Kenya and Ethiopia now allow clinical officers to prescribe ARVs and Rwanda now permits trained nurses to provide follow-up to patients on ARVs, freeing physicians to provide other more complex services.

The Caribbean HIV/AIDS Regional Training Initiative (CHART), a PEPFAR-supported project, has been created to build a cadre of highly-trained, committed professionals to help combat HIV/AIDS by training health practitioners and encouraging them to work together. With Emergency Plan support, CHART runs five training centers in the Bahamas,
Haiti, Jamaica, and Barbados, which are supported by a regional coordinating unit in Jamaica. At the start of 2006, more than 100 doctors, nurses, and other health practitioners had been trained as trainers to spread their knowledge to other health workers. Another 1,200 health care workers had completed multidisciplinary training that includes development of national HIV/AIDS work plans.

**Retention strategies:** One of the challenges to providing quality HIV/AIDS care and treatment, including ART, is the retention of skilled health workers such as physicians, nurses, and pharmacy and laboratory personnel. The Emergency Plan is supporting a number of innovative approaches to retaining health care workers. In Zambia, the USG, working with the Zambian Ministry of Health (MOH), supports a Physicians Retention Scheme which provides incentives such as housing, hardship allowance, transportation, and educational stipends for their children to 30-35 physicians who serve in rural areas throughout the country. It is estimated that this USG support will result in an additional 5,000 persons receiving ART services who would otherwise have been unable to access these services. In a successful effort to prevent brain drain from Namibia, the MOH provides a package of benefits, including medical benefits, housing support, paid maternity leave, a “13th cheque” on workers birthdays, and competitive salaries. As part of a comprehensive human resources for health strengthening strategy, the Malawi MOH provides free housing and support for educational scholarships to nurse tutors who are critical to creating a larger pool of new health workers. The AIDS Support Organization (TASO) in Uganda trains lay health workers to provide ART follow-up care in remote areas and retains them by providing field and transportation allowances, refunds for medical expenses, salary increments for good performance, and a supportive work environment.

Few developing countries can support the salaries necessary to encourage retention of scarce medical personnel. The resulting problem of brain drain exacerbates the shortage of health care professionals. Brain drain can also occur within a country. As resources expand, the buying power of some organizations can deplete the human capacity of institutions such as MOH.

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The Emergency Plan is supporting innovative programs to curtail brain drain. In Guyana, five hospitals were selected for upgrading as model PMTCT facilities. The recruitment process was carefully planned by staff of the Guyana HIV/AIDS Reduction and Prevention Project (GHARP), a joint USG-Government of Guyana project. GHARP, with the MOH, has brought retired highly trained and experienced nurses back into public service to provide HIV/AIDS care in the PMTCT facilities.

**Twinning partnerships:** To support nations’ efforts to build local capacity for sustainability, the Emergency Plan supports twinning partnerships. These partnerships may be between an international partner (including U.S.-based organizations) and a country partner, or between partners within a developing country. The USG centrally-funded HIV/AIDS Twinning Center supports strengthening of human and organizational capacity by using health care volunteers and twinning relationships to facilitate skills transfer and rapidly expand the pool of trained providers, managers, and other health staff delivering HIV/AIDS prevention care and treatment services. The Twinning Center currently supports 17 partnerships, with three new partnerships in development. A twinning partnership in Tanzania between the Mihimbili University and the University of Michigan will integrate HIV/AIDS care into the nursing school curriculum and develop a cadre of HIV/AIDS nursing instructors to provide clinical mentoring to faculty at all 56 of Tanzania’s nursing schools. An expected 6,600 nursing students will receive advanced HIV/AIDS instruction and nearly 2,000 nurses will graduate annually with a strong foundation in HIV/AIDS-related treatment and care as a result of this partnership. A South-to-South twinning relationship between the government of Botswana and the African Palliative Care Association based in Uganda resulted in the training of nearly 200 health professionals and community-based coordinators in palliative care. The Twinning Center also oversees the new Volunteer Health-Care Corps, a network of health care volunteers, HIV/AIDS professionals, and support personnel who will be placed within the twining partnerships. These volunteers will support Emergency Plan partners with clinical, educational, and capacity-building services without interrupting ongoing services. It is also anticipated that a number of partnerships established through the PEPFAR New Partners Initiative (NPI) will be provided management support by the Twinning Center.

**Challenges and Future Directions**
**Sustainability:** The PEPFAR program recognizes that appropriate and adequate human capacity and human resources for health provide the foundation for high-quality, sustainable care. Each of the PEPFAR country activities and programs to build human resource capacity are designed in concert with host governments’ strategies to build sustainable efficient, equitable, and accessible HIV/AIDS services. The Emergency Plan has brought unprecedented focus to building the institutional and human resources capacity of local organizations, including host governments and community and faith-based organizations, to plan, implement, and manage HIV/AIDS programs to ensure sustainability. The Emergency Plan has invested nearly $68 million in human resources development and over $90 million to build local organizational capacity so far this fiscal year.

More than twenty percent of Emergency Plan partners in fiscal year 2004 were host government entities, including MOH and associated institutions, research organizations, and AIDS coordinating authorities. In several focus countries, U.S. personnel are located in or detailed to ministries of health to assist in building long-term strategies for building sustainable capacity. Innovative approaches to support human resources in government institutions have been successful in many PEPFAR countries. In Namibia, for example, the Emergency Plan supports physicians, nurses and counselors through contracting agencies.

The Emergency Plan is also pursuing innovative approaches to strengthening capacity of NGOs. In Botswana, the USG initiated and supported Tebelopele, the largest provider of voluntary counseling and testing, with 16 sites and four mobile caravans. It was transitioned in 2004 to become an independent NGO, with all staff and assets transferred from the U.S. Mission. Tebelopele is now receiving technical assistance from a USG-funded partner to expand management capacity and ensure that it succeeds as a sustainable NGO.

In FY 2005 several focus countries began pursuing the use of local “umbrella” contractors to manage the activities required to receive funds directly from the USG. Some of these local umbrella contractors also serve as fiduciary agents for the Global Fund to Fight AIDS, Tuberculosis and Malaria. The Emergency Plan is also working to incorporate “graduation” language in contracts with non-indigenous prime partners. This language
provides for the performance of these partners to be evaluated, in part, on
their success in transferring skills to their indigenous sub-partners who can
then become prime partners of the Emergency Plan.

Coordination with other partners is also critical to the long-term
sustainability of PEPFAR programs. The United States works closely with
the WHO to support the implementation of evidence-based human resources
for health policies and practices. Human capacity development is a major
priority for both the Emergency Plan and the WHO. Preliminary discussions
early in FY 2004 have now led to coordinated activities to provide the
training and technical assistance necessary for sustained responses to
national HIV/AIDS epidemics. In Mozambique, for example, the Emergency
Plan and the WHO are jointly conducting comprehensive human capacity
development assessments to identify specific strategies to address long-term
human resource needs. In May 2006, the USG participated in the WHO
consultation to develop a Health Workforce Strategy to address the growing
human resources for health crisis in the countries of sub-Saharan Africa
struggling to scale up HIV/AIDS services. The Emergency Plan will
continue to work closely with WHO on this issue.

The USG has also partnered closely with other international partners to
pursue joint strategies to address the human resources for health needs of the
PEPFAR countries. In 2003, the United States and the United Kingdom
(U.K.) governments launched a special Joint Task Force on HIV/AIDS to
strengthen cooperative efforts in five African countries severely affected by
HIV/AIDS—Ethiopia, Kenya, Nigeria, Uganda, and Zambia. One of the
strategic goals of this U.S.-U.K. coordination is building a skilled force of
health care workers in the five countries. The Netherlands is another
international partner with whom the USG collaborates on a country level.
The U.S.-Dutch field collaboration includes working together in Zambia
where the Netherlands is shifting its support for individual NGOs to broaden
support for institutional and human capacity building in non-governmental
and community-based organization networks to better align with the
PEPFAR country strategy.

**Conclusion:** The paucity of trained health professionals and other human
resources to combat HIV/AIDS in the focus countries is a stark indicator of
the challenges facing the Emergency Plan. Policies that mandate that only
health professionals can provide health services, when trained community
health workers could provide components of prevention, care, and treatment services at the home and community level, worsen problems related to the lack of human resources to provide these critical services.

The network development programs and the other innovative programs described in this report require commitment and leadership on the part of political and social leaders in the countries. Virtually all of the PEPFAR countries need to develop comprehensive training plans for prevention, care, and treatment that are coordinated across all implementing partners and with the ministries of health. Many of the countries continue to need assistance in developing strategies to address brain drain through sustainable retention and incentive schemes. Advocacy for human resource policy change to allow for task-shifting and workforce expansion is critical, as is the development of workforce management strategies that include support for workforce planning to appropriately utilize and support new cadres of health workers.

While the solutions to the need for expanded and improved health care systems and workers ultimately lie with the countries, the Emergency Plan emphasizes the need to share lessons learned, provide policy and technical guidance, and technical assistance to respond to the human resources challenges faced by host governments in the PEPFAR countries.