

Report to Congress by the U.S. Global AIDS Coordinator on Best Practices and Cost Effectiveness



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The Office of the Global AIDS Coordinator provides this *Report on Best Practices and Cost Effectiveness* pursuant to P.L. 110-293, the Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008.

As The President's Emergency Plan for AIDS Relief (PEPFAR) continues in its second phase, efforts to sharpen the strategic focus and build upon the successes of the past seven years are in process. The interagency technical working groups (TWGs) comprised of headquarters and field representatives review PEPFAR's programs globally and identify best practices, emerging issues and lessons learned, as described in this report.

Prevention

Prevention of Mother-to-Child-Transmission (PMTCT). The implementation of PMTCT programs over the past seven years demonstrated that a referral staff or nurse accompanying the HIV-positive woman to a treatment and care clinic is effective (with provision of transportation funds as necessary). In addition, assisting a woman in the registration process increases the number of pregnant women who receive treatment services. Currently, this practice of accompanying pregnant women to treatment and care clinics is being implemented in Botswana, Zambia and Zimbabwe and being introduced in several other PEPFAR countries.

Updating registers and mother and child health cards with HIV and PMTCT information helps identify women with unknown status at labor and delivery and at immunization or other child follow-up clinics. Such identification provides an opportunity to offer and test women and infants postpartum, and to facilitate appropriate PMTCT interventions, follow-up and linkages to care and treatment.

In Botswana, Ethiopia and other countries employing lay and other peer counselors to provide HIV Counseling and Testing (HCT) services within PMTCT settings is successful in increasing the number of pregnant and non-pregnant clients who know their status. Along with this best practice and other PMTCT interventions, in 2009 over 7 million pregnant women received counseling and testing services in PEPFAR support countries. In South Africa, mother support groups and people living with HIV/AIDS (PLWHA) peer programs are an effective intervention for dealing with staff shortages, reducing the burden on health care workers, mobilizing support within the HIV-positive community ("living positively") and improving linkages with the community while increasing HIV testing and PMTCT program participation rates. In many of the mother support groups, the women provide supportive services such as home-based care, accompanying mothers to clinical services, and psychosocial support.

Male circumcision (MC). Three randomized controlled clinical trials conducted in sub-Saharan Africa indicated that medical adult male circumcision (MC) reduces men's risk of HIV acquisition by at least 60%, a potential protective effect

equivalent to a vaccine. In March 2007, UNAIDS and the World Health Organization (WHO) issued normative guidance stating that MC should be recognized as an additional intervention to reduce the risk of male heterosexually acquired HIV infection, and that MC be implemented as part of a comprehensive HIV prevention package. In Zambia, some MC services are integrated within existing infrastructure and programs, offering MC surgeries within VCT sites. In Kenya, over 130,000 clients were reached with MC services using approaches including outreach to smaller health facilities and mobile services to schools/colleges, community center/markets and churches.

Most-at-Risk Populations (MARPs). Access to a package of services that focuses on adherence to antiretroviral therapy (ART), prevention, and treatment for opportunistic infections is an effective set of interventions for reaching specific MARPs. The package includes peer education and outreach, accompanied by risk reduction counseling and commodity provision. Such packaging of services, which are implemented in many PEPFAR countries such as Cote d'Ivoire and India, is effective in reducing sexual and drug-using risk behaviors amongst commercial sex workers, men who have sex with men (MSMs), and injecting drug users (IDUs). Fifteen of 19 global studies among sex workers reported significant increases in condom use due to the availability of such packages, with seven of the studies documenting sustained increases over time. All sex worker interventions reviewed involved peer education, condom provision and/or STI diagnosis and treatment. Comprehensive substance abuse treatment reduces the frequency of drug use, which in turn reduces HIV risk behaviors. It also improves adherence to disease treatment regimens. Methadone maintenance therapy is associated with reduced HIV risk behaviors including reduced frequency of injecting and sharing of injection equipment, reductions in the number of sex partners, and exchanges of sex for drugs or money.

Prevention in the General Population. An important lesson learned in prevention is the need to integrate and strengthen behavior change interventions across a wider range of HIV and other health services. Strengthening prevention counseling within PMTCT and HCT services is critical for HIV-positive persons, but also is an opportunity to reinforce prevention messaging with HIV-negative individuals to keep them HIV free. Treatment, PMTCT and HCT also represent crucial entry-points for identifying sero-discordant couples and intensifying risk reduction counseling and condom promotion for this population. Using these key entry points and other prevention methods, over 77 million individuals were reached with community outreach HIV/AIDS prevention activities that promote behavior change approach for sexual prevention in PEPFAR supported countries.

Evidence shows that most HIV-positive persons who know their status take steps to reduce their risk behaviors and protect their sexual and injection partners. Provider-initiated HCT in health facilities is essential to increase the number of persons who know their HIV status, and to identify those in need of care and treatment. Provider-initiated HCT programs demonstrate reduced stigma and discrimination, identified previously undiagnosed HIV infections, prompted earlier referral to and access of care, and increased the ability of women to access testing.

Many PEPFAR-supported countries including Botswana, Uganda, Kenya, Cote d'Ivoire and Zambia demonstrated innovative best practices in HCT including policies which allow for the use of finger-prick, rather than traditional blood draw, for HIV rapid test blood sample collection. Using a blood sample obtained from a finger-prick is advantageous because it is less invasive, reduces the amount of medical waste associated with HIV testing, and reduces the likelihood of unintentional needle sticks among HIV test providers.

Blood and injection safety. A key lesson learned from the PEPFAR blood safety experience in partner countries is the need for the development of national blood policies that rely on voluntary non-remunerated donors, even in countries with systems previously centered on family and replacement donors. For example, Haiti increased collections from voluntary non-remunerated donors through blood caravans which hold mobile collection drives involving local popular personalities (including radio D.J.s). Collections increased by 42%, allowing the blood service to reach its goal of 13,600 units collected nearly 2 years before the target date. The use of social marketing techniques resulted in the expansion of the national blood donor pool beyond a small core of traditional, older, wealthier, volunteers.

Care and Treatment

Cost-effectiveness and sustainability. Programs were enhanced by achieving significant cost savings on ARVs and strengthening health systems. Cost savings achieved through a number of approaches; include greater reliance on lower-cost generic drugs. Based on annual PEPFAR procurement surveys, the vast majority of ARVs utilized in programs are now generic, freeing up funds to support additional people on treatment. Lessons learned show that ART programs that set up a package of comprehensive services can achieve patient outcomes similar to programs that use more resources. In many PEPFAR countries, the public health approach used in national treatment programs include simplified clinical decision-

making, standardized ART regimens, care delivered by trained physician alternates, limited laboratory support, and centralized monitoring and evaluation.

Family-centered approach to care and treatment. Program experience in Ethiopia and Tanzania demonstrates that combining the availability of services for adults and children by providing ART as well as PMTCT at all sites optimizes the opportunity to retain the family within the service setting. Pediatric and adult treatment programs should be co-located, appointments co-scheduled, and clinic hours extended to weekends and evenings where possible, or at the sites closely linked for efficient referral. Co-locating treatment services coupled with extensive clinical scale up enabled PEPFAR to provide ART for nearly 2.5 million adults and approximately 201,000 children aged 0-14 in 2009.

Use of cotrimoxazole (CTX). Provision of CTX (a combination of two antibiotics) to HIV-exposed/infected children is the most cost-effective non-ART intervention to reduce morbidity and mortality, estimated at US\$0.03 per child per day or US\$10/year. CTX use is a good marker for quality of pediatric HIV care. All 15 original PEPFAR focus countries implement CTX prophylaxis policies in line with 2006 WHO guidelines.

Provision of HIV care and treatment in TB clinical settings. To increase the timely uptake of HIV care and treatment services among HIV-positive TB patients, several countries chose to pilot the provision of HIV care and treatment services in TB clinics. A key lesson learned from the pilot is that some or all components of HIV care and treatment (e.g. provision of CTX preventive therapy, CD4 testing, and ART) are essential in TB clinics for HIV-infected TB patients. TB providers are trained to provide HIV care and treatment and receive supervision support from national AIDS program staff. Referral and follow-up are strengthened to ensure that patients who are started on HIV care and treatment in TB clinics are transitioned to continue their HIV care and treatment at a nearby HIV clinic. In 2009 PEPFAR supported more than 300,000 HIV-infected clients who received both HIV care & support services and treatment for TB.

Cross-cutting

Human resources for health (HRH). Workforce planning and rationalization is essential to addressing health workforce shortages and retention issues. Most countries have a national HR plan for the health sector but not all the countries use these plans for workforce planning. In order for the HRH plans to be effective for both short and long term workforce planning, they must be costed, competency-based, use credible data and have an implementation strategy with a timeline.

Currently programs in Mozambique, Uganda, Ethiopia, Namibia, and Zambia have effective HRH plans.

Task-shifting is an effective strategy for expanding the health care workforce. Policy change to allow task-shifting from more specialized to less specialized health care workers is one HRH strategy with immediate effect on increasing the pool of health workers to deliver HIV/AIDS services. Ethiopia, Mozambique, Kenya, and Malawi are among the countries which created new cadres of health care workers to assume tasks formerly provide by doctors and nurses. Appropriate training, supportive supervision and re-training of these cadres are essential for effective task-shifting. The importance of training health and community workers is fundamental to implementing high quality programs, and from 2004-2009 PEPFAR trained and retrained over 5.2 million individuals to perform a broad range of HIV specific services.

Biologic and behavioral risk surveys among militaries. HIV surveillance studies use HIV rapid tests in counseling and testing settings in order for participants to know their status and receive referrals to care. There are a number of successful behavioral and biological surveys among militaries in Africa. Protocols and surveys are developed or adapted in collaboration with partner militaries with strategic information and counseling and testing capacity building for the host military as a key deliverable. Surveys include modules on addressing alcohol consumption; male norms, MC, and factors contributing to HIV risk in women. The following are a sample of militaries where HIV behavioral and biologic surveillance planning or implementation with PEPFAR support is in process: Sudan, Botswana, Ethiopia, Lesotho, Mozambique, Rwanda, Swaziland, Uganda, and Zambia.

South-to-south technical assistance. As surveillance opportunities increase due to new, better methodologies for understanding HIV prevalence in both general and sub-populations, experience in the field is the single best way to modify and standardize these methodologies. National counterparts who conducted these methodologies retain an expertise in surveillance along with local context and can share their experience with other countries embarking on similar methodologies. The practice is significant because Thailand provides technical assistance throughout the South East Asia Region. In Africa, a national counterpart from Zanzibar is consulting and training East African countries in respondent-driven surveys, which are being initiated in the region and remain challenging to implement.