

# Policy Brief

## Who are the frontline health workers



Photo from Frontline Health Workers Coalition

Frontline health workers deliver a range of basic health care and life-saving interventions, and are widely-considered a “best buy” for global health. But according to the World Health Organization, there is a shortage of at least 1 million frontline health workers in the developing world (High Level Task Force, 2010). Existing frontline health workers could save many more lives if they had improved training and constant supplies.

The United States has a critical role to play. The Frontline Health Workers Coalition, comprised of leading global health organizations, is calling on the U.S. government to make greater and more strategic investments in new and existing frontline health workers in the developing world as the most immediate and cost-effective way to save lives, and foster a healthier, safer and more prosperous world.



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## Saving Lives on the Frontline

### Eliminating Pediatric HIV and AIDS

More than 20 years into the HIV epidemic response, prevention of and treatment for pediatric HIV and AIDS remain major health challenges in resource-poor settings. Although interventions to prevent the transmission of HIV from a mother to her child have been in use for over a decade, more than 900 children are still infected with HIV every day.<sup>1</sup> Children living with HIV disproportionately lack access to care and treatment services needed for their survival. Without treatment, half of these children born with HIV will die before the age of 2, and 80 percent by the age of 5.

In July 2011, UNAIDS and the Office of the U.S. Global AIDS Coordinator released *The Global Plan towards the elimination of new HIV infections among children and keeping their mothers alive* (the “Global Plan”).<sup>2</sup> The Global Plan announced two main targets for 2015: a 90 percent reduction in the number of children newly infected with HIV, and a 50 percent reduction in the number of AIDS-related maternal deaths. Reaching these targets requires accelerated action across a number of key areas, known as the four prongs of the prevention of mother-to-child transmission of HIV (PMTCT). They include the prevention of HIV among women of reproductive age; prevention of unintended pregnancies among women living with HIV; ensuring HIV testing and access to antiretroviral drugs (ART) to prevent HIV transmission from mother to child; and provision of treatment, care, and support to mothers living with HIV, as well as to their families.

The elimination of pediatric HIV and AIDS will not happen without increased investments in the health workforce, especially those serving on the frontlines of the HIV epidemic in weak health systems—doctors, nurses, midwives, community health workers, and health educators are often the only point of contact for millions in need of services. Frontline health workers are at the epicenter of the system-strengthening and coordination efforts required to implement the Global Plan and related HIV and maternal-child health (MCH) efforts. Unfortunately, in 2010, there was an estimated shortage of at least 1 million frontline health workers in the developing world.<sup>3</sup> Quite simply, an AIDS-free generation will not happen unless donors and governments address the weak health systems and lack of trained, equipped, and supported health workers needed for live-saving services to reach HIV-positive women, their children, and their families. This issue brief focuses on the importance of increasing the number of frontline health workers in countries with high HIV burdens, as well as enhancing the skills and

<sup>1</sup> “UNAIDS Report on the Global AIDS Epidemic” (UNAIDS, December 2012): 38.

<sup>2</sup> Available at [www.zero-hiv.com](http://www.zero-hiv.com).

<sup>3</sup> “Frontline Health Workers: The Best Way to Save Lives, Accelerate Progress on Global Health, and Help Advance U.S. Interests” (Frontline Health Workers Coalition, 2012): 1.

support mechanisms for the workforce already in the field in order to maximize health outcomes – for mothers and their children – through PMTCT programs.

## The role of Frontline Health Workers in PMTCT service delivery

Decades of evidence show that proper use of antiretroviral medications during and after pregnancy can prevent the transmission of HIV from a mother to her infant. In fact, new pediatric HIV infections in the developed world have been virtually eliminated. However, in low- and middle-income countries, only 57 percent of the estimated 1.5 million pregnant women living with HIV received effective antiretroviral drugs that would prevent transmission to their children in 2011, falling considerably short of the Global Plan’s coverage target of 90 percent by 2015.<sup>4</sup>

Mother-to-child transmission of HIV can occur during pregnancy, labor and delivery, and breastfeeding. While much of the focus of PMTCT is on the use of antiretroviral drugs to reduce the mother’s viral load and lower the chance of pediatric HIV infection, PMTCT comprises a number of critical interventions needed to protect the mother’s health and keep children HIV-free, including: HIV testing, prenatal treatment, safe childbirth, child health visits, safe breastfeeding, early infant testing, and treatment if the child is HIV-positive. Successful interventions require that service linkages be established during antenatal, partum, and post-partum care so that the mother-infant pair receives continuous support. Without consistent support from health workers, women are often lost while transitioning among these different services and ultimately stop receiving care, a situation known as “loss to follow up.”

The majority of PMTCT services occur in the maternal and child health care setting, of which antenatal care (ANC) is a primary component; therefore the ability of every ANC clinic to provide comprehensive PMTCT services is vital in getting to the elimination of pediatric HIV.<sup>5</sup>

First and foremost, a woman’s initial ANC visit presents an opportunity to determine her HIV status. While nurses traditionally handle HIV testing and counseling tasks in most health clinics, more and more often lay counselors are being utilized for pre- and post-test counseling - an essential aspect of HIV testing that prepares clients, and increasingly couples or families, to cope with and understand the implications of an HIV diagnosis. The placement of these additional frontline health workers helps to reach more patients and alleviates a

portion of the burden borne by nursing staff at clinics. Once a woman is identified as being HIV positive, her support needs are both medical and psychosocial: in addition to antiretroviral drugs (ARVs), she must receive additional support throughout her pregnancy that can be fulfilled through expert clients or peer mentors, either at the facility or in the community. Helping mothers remain negative is critical, since HIV infection can occur even after the initial HIV test is negative.

## Increased need for post-partum care and health worker support outside of the clinic setting

Treatment and prevention breakthroughs have changed the way PMTCT services are provided, with additional elements requiring patient interactions outside of the formal health clinic setting. In earlier iterations of World Health Organization (WHO) guidelines, women were given a single dose of nevirapine at the onset of labor to prevent HIV transmission; this has been updated with more effective double and triple regimens of ARVs initiated as early as the 14th week of pregnancy and continuing through delivery and breastfeeding.<sup>6</sup> What used to occur in a single visit is now more than 18 months of patient interactions with health workers during and after pregnancy. This continuum of care is only achievable through greater health worker involvement in patient support, education, and counseling, as well as ensuring continuity of services among ANC, MCH, and HIV treatment settings.

As PMTCT programs evolve and involve longer-term interactions between patients and the health care system, successful PMTCT outcomes rely not only on the interactions in the clinic setting, but also those that take place in the home and in the community. This is especially important during the post-partum period when the new mother faces decisions around infant feeding, basic care, and follow up care for herself and her newborn, and potentially faces lifelong antiretroviral therapy (ART). Working with a trained and trusted health worker in a community setting is critical for adherence and follow-up, particularly when health recommendations, such as early ANC attendance, exclusive breastfeeding for six months, and taking drugs when a person does not feel sick, may run counter to social norms. Health worker interaction with spouses and the wider family and community can help to counter stigma and discrimination while creating a safer, more supportive space for a woman living with HIV to care for herself and her child. The role of the community health worker in these settings is also critical for educating family members and the community about HIV prevention and methods to avoid unintended pregnancy, the first two prongs of PMTCT.

<sup>4</sup> “Together we will end AIDS” (UNAIDS, 2012): 30.

<sup>5</sup> “PEPFAR Guidance on Integrating Prevention of Mother to Child Transmission of HIV, Maternal, Neonatal and Child Health and Pediatric HIV Services” (PEPFAR, 2011): 2.

<sup>6</sup> “Programmatic Update: Use of Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection in Infants Executive Summary” (WHO, 2012): 1.

## ZIMBABWE: A Case Study

In the Tsholotsho District in Zimbabwe, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) supports a village health worker (VHW) program that aims to improve infant adherence to ARVs by offering additional PMTCT training, the provision of kits, uniforms, bicycles and the development of monitoring and evaluation tools for the health workers. Even less than a year after its implementation, the positive results of the program demonstrated the important role that community level interventions can play in improving PMTCT program outcomes. For example, the infant ARV adherence rate at 6 weeks in Tsholotsho was 57 percent – compared to the 35 percent adherence rate in the next highest district, which does not have a VHW program. Similarly, the proportion of women reporting for initial ANC visits before 21 weeks in the Tsholotsho District, an important health indicator, increased significantly as VHWs encouraged women in the community to enter care as early as possible in their pregnancies. Moreover, the engagement of VHWs led to an increase in referrals of clients to the health facility: 164 referrals were made for PMTCT-related reasons, with 22 percent of them being for infants who were not taken to the clinic for follow-up testing after six weeks of being born, a gap that impedes efforts for early infant diagnosis.

Based on the positive feedback from both VHWs and the women and families of Tsholotsho, EGPAF will be expanding their support of the program to additional districts in Zimbabwe and anticipate that the positive trends will continue to improve PMTCT program outcomes.

One example of the need for post-partum health care interactions is the growing importance of ART for women during the breastfeeding period – for their own health and for the health of their baby. While ART coverage for PMTCT has increased overall, coverage during breastfeeding is not nearly as high as it is during pregnancy and delivery. Among the 21 Global Plan priority countries in sub-Saharan Africa, coverage of ARV prophylaxis during breastfeeding drops to 29 percent, compared to 61 percent during pregnancy and delivery.<sup>7</sup> South Africa, which has the highest ART coverage for pregnant women, falls to 38 percent for coverage during the breastfeeding period.<sup>8</sup> Home visits by community health workers to reinforce safe breastfeeding techniques, adherence to ART prophylaxis, and regular post-natal care visits for both mother and baby during this period have been proven to increase optimal behaviors and positive health outcomes.

Ensuring that children born with HIV are identified and linked to care is just as critical as post-partum follow-up of women. Early diagnosis and treatment for HIV-infected children can make the difference between life and death, given that HIV progresses much faster in children than adults. Unfortunately, there is a large unmet need in pediatric treatment, with only 28 percent of HIV positive children on treatment who need it versus 54 percent of adults.<sup>9</sup> Community health workers and peer educators are vital to saving these children's lives, since they can follow up with HIV-exposed infants and identify children who may have unrecognized HIV within the community. Health workers are trained to bring children into points of care since they cannot attend alone. Additionally, they work with mothers and

families to recognize critical danger signs and early symptoms of HIV infection. The frontline workers who attend to sick and malnourished children must also be trained to recognize HIV, since the earliest symptoms often appear as common illnesses.

### Challenges in current health workforce capacity around PMTCT and pediatric AIDS

Having a sufficient number of health care workers and keeping them supported, trained, and motivated remains challenging. In several countries in Africa, the majority of the physicians in service are expatriates.<sup>10</sup> Poor distribution of workforce – with higher concentration of staffing urban areas than rural ones – can make scarce human resources for health seem even more scarce for many in need. In many rural clinics, there is only one health care worker who must provide all services. Many of these workers do not have adequate training or support to be effective.<sup>11</sup> Burnout due to high work volumes, poor working conditions and frustration over issues such as supply stock outs, causes a high attrition rate among these frontline health care workers.<sup>12</sup> Moreover, as ARV regimens continue to evolve, keeping health workers supplied and trained on updated protocols will be challenging.

One example of this problem cited by national PMTCT scale-up plans is frequent staff rotations among health clinics.<sup>13</sup> In

<sup>10</sup> Africa Health Workforce Observatory. Human Resources for Health – Swaziland Profile. 2009.

<sup>11</sup> Dovo D. Wastage in the health workforce: some perspectives from African countries. *Hum Resour Health*. 2005; 3: 6. Published online 2005 August 10. doi: 10.1186/1478-4491-3-6.

<sup>12</sup> Iglesias ME, Vallejo RB, Fuentes PS. Reflections on the burnout syndrome and its impact on health care providers. *Ann Afr Med* 2010;9:197-8.

<sup>13</sup> Lesotho, Swaziland and Kenya PMTCT country plans.

<sup>7</sup> "Together we will end AIDS" (UNAIDS, 2012): 31.

<sup>8</sup> "Together we will end AIDS" (UNAIDS, 2012): 123.

<sup>9</sup> "UNAIDS Report on the Global AIDS Epidemic" (UNAIDS, December 2012): 47.

many resource-constrained countries, rural clinics are seen as undesirable, high-stress health care posts with lower opportunity for professional advancement; therefore, countries frequently rotate staff in the hope of preventing health care workforce burnout and retaining more of the existing health cadres.<sup>14</sup> In fact, several countries require rotations between health facilities and various departments as a prerequisite for promotions within the health service. While these rotations may help a health worker's career advancement, the constant turnover of staff creates a burden on facilities to constantly train new staff to deliver PMTCT services. Many health facilities dealing with staff rotation report that it is difficult to build the continuity, trust and expertise needed to provide good quality care.<sup>15</sup>

Task shifting and sharing policies also impact the effectiveness of the existing health workforce. In countries using task shifting, policies expand the types of health cadres permitted to provide certain key services if doing so improves the productivity of the health workforce (e.g. permitting nurses to prescribe ART, a task previously done only by physicians). Within PMTCT, there are opportunities to use task shifting to make the most of existing personnel as well as to establish more support cadres to enable facilities to deliver more comprehensive care and improve the quality of services. However, care must be taken to ensure that task shifting does not undermine the quality of the service provided - there is still more to learn about the impact of task shifting on patient outcomes, training and supervision needs, institutional resistance to changing practices, and motivating health workers to take on additional tasks.

Investing in additional health care workers while simultaneously strengthening the policies that impact the health care workforce will provide a substantial push in the elimination of pediatric AIDS, as well as increase coverage of services for both mothers and children.

## Recommendations: Investing in frontline health workers to help eliminate pediatric HIV and AIDS

Additional health care workers and increased training and support for existing frontline health workers are critical to eliminating new HIV infections in children. Recommendations for action include:

Support and grow the existing frontline health workforce: In order to expand the number of services available to HIV positive

<sup>14</sup> Working Together for Health, the World Health Report 2006. World Health Organization, Geneva 2006.

<sup>15</sup> Zurn P, Dal Pozv M, Stilwell B, Adams O. Imbalance in the health workforce. *Human Resources for Health* 2004, 2:13 doi:10.1186/1478-4491-2-13.

women, facility-level and district-level assessments must be done to determine what the health workforce gaps are and what type of health workers are needed to adequately fill those gaps. Additional positions should be funded through country budgets or with donor assistance. In 2008, through the *Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008*, the U.S. government committed to support training of at least **140,000** new health care workers in HIV/AIDS prevention, treatment and care. Fulfillment of this commitment will go a long way toward addressing workforce gaps in priority countries.

Invest in health workforce cadres that focus on community-based efforts and strengthen health systems to extend care where it is needed most: Building health care workforces at the community level brings care closer to populations most in need, and these local health workers can improve uptake of services and ensure linkages across points of care.

Implement policies at the country level that favor health care worker retention: To reduce high levels of health worker attrition and placement imbalances in high-burden countries, structural changes such as improving working conditions and human resource management are needed to expand the reach of services and improve job satisfaction and motivation. Reconciling national policies with articulated health needs at a local level will improve the quality of patient care and ensure much-needed staffing at disadvantaged health facilities, such as those in rural and slum areas. Furthermore, human resource management systems that recognize and reward outstanding work of health workers on the frontlines can help advance their commitment to staying on the job.<sup>16</sup>

## Conclusion

Thanks to scientific advancements and increasing country ownership, the elimination of pediatric HIV is, for the first time, a real possibility. But even the most efficacious drug regimens will fail without the frontline health workforce in place to deliver these interventions to the women and children who need them. Frontline health workers at all levels are critical to ensuring that mothers survive, that their children remain HIV-free, and that the goals for elimination of pediatric AIDS can become reality in the near future.

<sup>16</sup> Zurn P, Dal Pozv M, Stilwell B, Adams O. Imbalance in the health workforce. *Human Resources for Health* 2004, 2:13 doi:10.1186/1478-4491-2-13.