Spotlight On…

Care and Treatment of HIV Infection in Infants and Young Children

An estimated 430,000 children were newly infected with HIV in 2008, and approximately 2.1 million children are currently living with HIV worldwide. Without appropriate and timely diagnosis, care, and treatment, up to 50% of these children will die before their second birthday. Improved diagnostic tools are now available to enable the more rapid detection of HIV infection in infants and young children. At the same time, access to antiretroviral therapy (ART), as well as numerous other facility- and community-based interventions geared toward this vulnerable group, continue to expand. It is therefore critical that these lifesaving interventions are strategically and comprehensively scaled up and integrated within existing maternal and child health services to ensure their widespread access and sustainability.
Welcome!

Welcome to the Elizabeth Glaser Pediatric AIDS Foundation’s quarterly technical bulletin, *Haba Na Haba*.

This publication was established to provide a dynamic forum for the routine sharing of technical information and program experiences across the Foundation, as well as with our extended family of partners and other like-minded organizations around the world. In addition to regular updates, each issue of *Haba Na Haba* highlights a topic of particular importance to the Foundation. The highlighted topic for this issue is care and treatment of HIV infection in infants and children. We hope you enjoy the information presented, and we invite you to stay tuned for the next issue, which will bring you the latest exciting news from across the hall and across the ocean!

**What Does Haba Na Haba Mean?**

The name of the bulletin, *Haba Na Haba* (“little by little”), is borrowed from the Swahili proverb *haba na haba, hujaza kibaba* (“little by little fills the pot”) and was chosen to reflect the often incremental nature of progress in our field. As the experiences described on the following pages demonstrate, the smaller efforts of every one of us are the essential “ingredients” for mounting a strong and united global response to HIV and AIDS.

Feedback and contributions are welcome from all Foundation staff. Please send your questions, comments, or content submissions to techbulletin@pedaids.org.

---

Spotlight On… continued

The number of children receiving HIV care and treatment has increased significantly in recent years, yet scale-up of services to meet the needs of all children living with HIV remains a tremendous challenge. At the end of 2008, only 38% of the approximately 730,000 children under the age of 15 in need of ART were receiving it. While this represents more than a three fold increase in the number of children who were receiving ART in 2005, current provision of pediatric ART is still falling well short of the United Nations Children’s Fund (UNICEF) Unite for Children, Unite against AIDS goal of providing ART to 80% of children in need by 2010. These shortfalls have deadly consequences. In sub-Saharan Africa, the contribution of HIV to mortality of children under age five ranges from 7% to more than 50%.

A variety of challenges related to the identification and follow-up of HIV-positive infants and children in resource-limited settings have contributed to the low proportion of children accessing ART (see Box 1). Loss to follow-up of HIV-positive mothers and their infants is one of the most significant barriers to pediatric ART enrollment and is largely due to shortages of health-care workers and poor linkages between prevention of mother-to-child HIV transmission (PMTCT) and HIV care and treatment services. Lack of integration of HIV care and treatment within maternal and child health services (e.g., well-child clinics) is another key challenge, most notably for settings where specialized ART clinics, especially those that provide pediatric ART, are few and far between.

It is critical that national programs prioritize the unmet need for pediatric HIV care and treatment, especially in light of the rapid disease progression observed in children under two years of age. In 2008, the World Health Organization (WHO) revised its recommendations on pediatric ART to support initiation of ART for all infants (i.e., children under 12 months) with confirmed HIV infection regardless of their clinical or immunological status. Yet unfortunately, in 2008 only 15% of HIV-exposed infants in low- and middle-income countries were tested for HIV in their first two months of life. In addition to the ongoing prospective need to test and treat the youngest children quickly in order to avert severe illness and loss of life, there is an ever-growing backlog of older children still in need of treatment.

**Early Infant Diagnosis: A Critical Link**

Identifying and testing HIV-exposed infants during the first few months of life is critical to ensuring their timely access to HIV care and treatment. In recent years, the growing use of dried blood spot (DBS) samples for DNA polymerase chain reaction (PCR) testing—the optimal method of
detecting HIV infection in infants younger than 18 months—has made these tests more accessible in settings with limited laboratory and human capacity. It can be up to several months for PCR test results to be returned to health facilities in settings where reliable transportation and efficient laboratory networks are not readily available. These long wait times often result in parents or caretakers never receiving their infant’s test results. Key activities that must be strengthened in order to identify the majority of HIV-exposed infants and to enroll them into HIV care and treatment in the first few months of life include follow-up and early testing of infants born to mothers in PMTCT programs; identification of HIV-exposed infants accessing non-HIV-related services (i.e., well-child clinics); availability and efficiency of DNA PCR testing; follow-up to ensure parents/ caretakers receive test results; and prompt linking of HIV-positive children with comprehensive care, treatment, and support services.

**The Case for Pediatric ART**

Studies of the effectiveness of pediatric ART in resource-limited settings have found two-year survival rates exceeding 80% in various settings, including Côte d’Ivoire, Haiti, Malawi, and Zambia. Other studies have found survival probability at 12 months ranging from 87% to more than 95% in settings in sub-Saharan Africa and Asia. Access to comprehensive pediatric HIV care and treatment has also been highlighted by the United Nations as an obligation of states parties under the international Convention on the Rights of the Child, now in its 20th year of existence. Prices of first-line pediatric ART regimens have dropped considerably in recent years, to an average of US$50 per child per year or $115–$140 if syrups are used, and fixed-dose combinations (FDCs) are becoming more widely available. In light of the proven effectiveness of pediatric ART and the increasing availability of age-appropriate drug formulations, it is crucial that the Foundation and other similar organizations redouble their efforts to provide infants and young children in resource-limited settings with timely access to ART.

**Comprehensive Care and Support for Children Living with and Affected by HIV**

In addition to ART, a number of other proven interventions support the health and well-being of children living with and affected by HIV. These include a range of age-appropriate interventions that cater to children’s specific needs, such as psychological and social support (including both counseling and peer support activities), nutrition support (including appropriate infant and young child feeding practices to ensure normal growth and development), care and prevention of opportunistic infections, and educational assistance. These and other interventions will be explored in more detail in future issues of this bulletin.

---

**Foundation-Supported Activities**

The Foundation currently supports the provision of pediatric HIV care and treatment services in 12 country programs (see Box 2 for country listing). All of these countries are located in sub-Saharan Africa, home to 91% of new infections among children. Great progress has been achieved to date, with a total of more than 35,000 HIV-positive children under 15 years of age initiated on ART and more than 68,000 enrolled into care (as of September 2009) at Foundation-supported sites since these activities began in 2004. The majority of these efforts are supported through the Foundation’s Project HEART initiative, a seven-year HIV care and treatment program funded by the President’s Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Centers for Disease Control and Prevention that is currently in its final two years of operation.
The Foundation’s efforts to strengthen pediatric HIV care and treatment in resource-limited settings consist of three levels of activity: global level, national level, and district/site level.

Global Level
The Foundation is an active member of the Inter-Agency Task Team on PMTCT and Pediatric HIV Care and Treatment (IATT), the group that developed the UNICEF / WHO programming framework to support scale-up of HIV-related diagnosis, care, support, and treatment for HIV-exposed and HIV-infected infants and children. Additionally, the Foundation has many operational partners at the global level, including Baylor International Pediatric AIDS Initiative (BIPAI), International Center for AIDS Care and Treatment Programs (ICAP) at Columbia University, UNICEF, Program for Appropriate Technology in Health (PATH) and other HIV service providers, as well as several key donors.

Building strategically on these existing global partnerships—and forging new ones—is critical to achieving the Foundation’s goal of ensuring that infants and children living with HIV receive timely care and treatment services.

National Level
The Foundation provides broad national support for pediatric HIV care and treatment through partnerships with host country ministries of health and other stakeholders. National-level support includes policy, guideline, and training materials development; development and strengthening of national monitoring and evaluation systems; and planning, coordination, and resource mobilization (see Box 3). In most countries, the Foundation provides both site-level and broad national-level support.

District and Site Level
The Foundation currently provides district- and site-level support for pediatric and adult HIV care and treatment to 664 health facilities in 12 countries. Types of support provided include training, mentorship, and supportive supervision of health workers; addressing challenges related to drug procurement and supply chain management; psychological and social support (i.e., children’s support groups and peer counseling); and operations research. Technical support for specific program interventions, such as early infant diagnosis (EID) and provider-initiated testing and counseling (PITC) for children, is also provided.

See the Country Program Notes section of this issue of Haba Na Haba to read about a variety of ways the Foundation and its partners are engaged in supporting the care and treatment of infants and children living with HIV.

The Way Forward
The Foundation will continue to support the scale-up and integration of pediatric HIV care and treatment services within national health systems, while at the same time working to ensure that children and families affected by HIV have access to additional care and support in their communities. Together with its numerous partners around the globe, the Foundation is committed to further strengthening its program implementation, research, and advocacy efforts, with the goal of ensuring all children living with HIV receive comprehensive HIV care and treatment services.

Box 2. Countries Currently Supported by the Foundation to Provide Pediatric HIV Care and Treatment Services

<table>
<thead>
<tr>
<th>Country</th>
<th>Supported Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Côte d’Ivoire*</td>
<td>Mozambique*</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Kenya</td>
<td>South Africa*</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Mozambique*</td>
<td>Tanzania*</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Uganda</td>
</tr>
<tr>
<td>South Africa*</td>
<td>Zambia*</td>
</tr>
<tr>
<td>Swaziland</td>
<td>Zimbabwe</td>
</tr>
</tbody>
</table>

*Denotes Project HEART-supported country.

Box 3. Strengthening National Capacity for Provision of Pediatric HIV Care and Treatment

In addition to supporting direct provision of pediatric HIV care and treatment services, the Foundation engages in the following activities to strengthen the ability of national programs to achieve their pediatric HIV care and treatment objectives. As with all Foundation efforts, these activities are undertaken in partnership with local governments, strategic partners, and community groups as appropriate.

- Advocacy for government leadership, ownership, and accountability for the care and treatment of pediatric HIV infection
- Integration and linkage of HIV and maternal and child health services
- Capacity building, including clinical training, mentoring, and supportive supervision
- Commodity procurement and supply chain management
- Strengthening of laboratory capacity for early infant diagnosis
- Strengthening linkages between health facilities and communities
- Strengthening monitoring and evaluation of pediatric HIV care and treatment services
Sidebar 1: Strategies for Increasing Identification and Treatment of Infants and Children Living with HIV

By Denis Tindyebwa (dtindyebwa@pedaids.org)

Denis Tindyebwa is the Foundation’s Director of Pediatric Care and Treatment. He is based in Dar es Salaam, Tanzania.

Table 1 summarizes steps that can be taken at both the facility and national levels to increase and expand early infant diagnosis and early initiation of ART for infants and children. It should be noted that although the emphasis of these activities is on children, the provision of ART to eligible pregnant women and mothers as early as possible is of critical importance in ensuring the long-term health and well-being of children living with or affected by HIV.

Table 1. Steps to Increasing Early Identification and Treatment of Infants and Children Living with HIV

<table>
<thead>
<tr>
<th>Objective</th>
<th>Facility Level</th>
<th>National/Program Level</th>
</tr>
</thead>
</table>
| Provide care for HIV-positive mothers entering antenatal care (ANC) | - Counsel mother about her care and treatment options and the need for follow-up and testing of her infant  
- Record mother’s contact information  
- Send mother’s blood sample (not the mother) to the laboratory for CD4 testing at the time of her HIV diagnosis  
- Start mother on ART if she is eligible according to national guidelines  
- Provide combination antiretroviral prophylaxis for PMTCT if mother is not eligible for ART  
- Counsel mother on safe and appropriate infant and young child feeding (IYCF) practices | - Train all health workers in ANC on HIV counseling  
- Provide support for extra counselors if necessary  
- If needed, support addition of extra space for counseling, care, and support  
- Advocate for provision of HIV care, including ART, within maternal and child health (MCH) settings  
- Train health workers in MCH on HIV counseling and care, including ART and IYCF |
| Identify HIV-exposed and HIV-infected children as early as possible | - Record mother’s contact information for follow-up after delivery  
- Transfer maternal HIV information to the child health card at birth  
- Ask for mother’s HIV status, her ANC card, and/or her child’s health card at each immunization or sick visit  
- Record all HIV-exposed and HIV-infected children’s contact information to enable easy follow-up  
- Engage outreach clinics, volunteers, lay counselors, PLHIV groups, treatment support groups, and/or other community-based mechanism to follow-up with HIV-exposed children  
- Provide routine antibody testing for all children of unknown HIV status coming in contact with the health system  
- Provide DNA PCR testing for all HIV-exposed infants at 4 to 8 weeks of age  
- Target specific categories of high-risk children (e.g., orphans and other vulnerable children, children with an HIV-positive parent, children with TB) for provider-initiated testing and counseling (PITC)  
- Sensitize health workers, local health authorities, and communities on the benefits of early identification of HIV-infected infants  
- Train lay people (e.g., PLHIV group members) to increase number of available counselors and to improve referrals and follow-up of HIV-positive mothers and their children | - Provide or help distribute child health cards and registers for follow-up of HIV-exposed and HIV-infected children  
- Support use of outreach visits to follow up exposed children  
- Advocate for and/or support increased access to DNA PCR testing for children under 18 months of age  
- Train service providers at each child contact point on DBS specimen collection  
- Support DBS specimen transport and return of child’s test results to the facility and caregiver  
- Establish target for minimum turnaround time for results to caregivers and communicate this target to service providers  
- Support or facilitate uninterrupted supply of DNA PCR test kits and reagents |
### Table 1. Steps to Increasing Early Identification and Treatment of Infants and Children Living with HIV (continued)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Facility Level</th>
<th>National/Program Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide care and treatment to HIV-exposed and HIV-infected children as early as possible</td>
<td>- Initiate cotrimoxazole (CTX) for all HIV-exposed infants at 4 to 6 weeks of age or as soon as they are identified</td>
<td>- Train, retrain, and mentor service providers on care and treatment of infants and young children</td>
</tr>
<tr>
<td></td>
<td>- Record each instance where CTX is provided</td>
<td>- Provide or distribute job aids, registers, files, and other tools, such as growth charts</td>
</tr>
<tr>
<td></td>
<td>- Chart child’s weight on his or her health card at every visit and provide continued counseling and support on the importance of safe and appropriate IYCF practices regardless of child’s HIV status</td>
<td>- Facilitate and/or supplement supply of CTX</td>
</tr>
<tr>
<td></td>
<td>- Provide continuous counseling to caregivers on the need to continue CTX</td>
<td>- Advocate for availability of fixed-dose combinations (FDCs) and age-appropriate formulations</td>
</tr>
<tr>
<td></td>
<td>- For caregivers of children suspected to be living with HIV, reinforce the need to confirm the child’s HIV status and to treat as early as possible if HIV-positive</td>
<td>- Provide or support improvement of space for ongoing care and counseling of children and their caregivers</td>
</tr>
<tr>
<td></td>
<td>- Initiate ART for all HIV-exposed infants fulfilling criteria for presumptive diagnosis where there is no access to PCR testing or while waiting for PCR results</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Initiate ART for all HIV-positive infants and young children as soon as possible according to national guidelines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Provide ongoing adherence counseling to caregivers and older children</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Encourage caregivers to join available support groups</td>
<td></td>
</tr>
<tr>
<td>Monitor programs to continually improve quality of care for infants and children</td>
<td>- Hold monthly meetings to discuss data from MCH, EID, PITC, pre-ART, and ART registers</td>
<td>- Support monthly meetings to encourage data use and analysis</td>
</tr>
<tr>
<td></td>
<td>- Set targets for a few pediatric HIV care and treatment-related indicators to monitor progress</td>
<td>- Use quarterly data to provide feedback to sites</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide incentives to facilities for improved performance</td>
</tr>
</tbody>
</table>


### KEY RESOURCES ON PEDIATRIC HIV CARE AND TREATMENT


Sidebar 2. Trends in Children Initiating ART in Project HEART Countries

By Shobana Ramachandran (sramachandran@pedaids.org) and Andrea Wahl

The number of children newly initiated on ART is an important measure of the success of the Foundation’s pediatric HIV care and treatment efforts. A tally of the number of children started on treatment each quarter shows that between January 2006 and December 2009, there has been a steady rise in the number of children newly enrolled in the five country programs supported by Project HEART (Côte d’Ivoire, Mozambique, South Africa, Tanzania, and Zambia). When data are disaggregated by age, it appears that there has been a gradual but consistent growth in the number of children started on treatment in all three age categories (0–1 year, 2–4 years, and 5–14 years) during the same time period (see Figure 1).

Another useful metric this analysis shows is that the percentage of all patients initiated on ART who are children has remained fairly constant, at around 8% (see Figure 2), indicating that the number of adults initiated on ART has grown at a rate similar to the number of children. Further analysis is necessary to discover the reasons for this and to determine appropriate interventions to increase the proportion of clients served by Foundation-supported ART sites who are children.

References
Use of Peer Counselors to Scale Up Pediatric HIV Care and Treatment

Habel Alwanga (halwanga@pedaids.org), Michael Audo, Maxwell Omondi, and Josephat Deya

The Foundation’s Kenya program is a member of the AIDS, Population, and Health Integrated Assistance Program II in Western Province (APHIA II Western) consortium. Among the consortium’s mandates is the rapid expansion of pediatric and adult HIV care and treatment services through provision of support to provincial-level health facilities providing antiretroviral therapy (ART) and prevention of mother-to-child HIV transmission (PMTCT) services. One of the key challenges related to the expansion of these services in Kenya is poor linkages between ART and PMTCT programs, a gap that results in mothers and infants receiving PMTCT services often being denied the potentially lifesaving benefits of ART when they are lost to follow-up or not referred for early infant diagnosis (EID) and ART.

Data from Kenya’s National AIDS STI Control Program (NASCOP) indicate that out of 120,000 children eligible for ART, only 29,000 (24%) were receiving it as of December 2009. A critical intervention for increasing the number of HIV-positive children receiving ART is early diagnosis of all HIV-exposed infants and timely enrollment of HIV-infected infants into HIV care and treatment services. The success of this intervention requires that HIV-exposed infants are identified and brought in for testing during the first weeks of life and that HIV-positive mother-infant pairs are continuously followed up after enrollment into PMTCT programs.

Peer counselors—HIV-positive individuals who support others living with HIV in their communities—are well positioned to support mother-infant follow-up and linking of HIV-positive women and children to HIV care and treatment services. In sub-Saharan Africa, research has demonstrated that peer counselors can alleviate health worker shortages through task sharing (i.e., sharing of tasks normally performed by a physician or nurse with other cadres of staff or volunteers) and can be effective in linking HIV-positive individuals to health facilities through activities like home visits, counseling, and treatment adherence support. Use of peer counselors has been associated with increased retention of clients in ART programs, resulting from their level of active follow-up...
of clients in communities and other community- and facility-based outreach and support activities. Based on this evidence, APHIA II Western decided to institute the use of peer counselors at supported PMTCT sites to ensure HIV-positive women and infants would be identified and linked to long-term HIV care and treatment services, as well as health education and psychological support.

**Peer Counselors Fill the Gap**

The APHIA II Western project initiated the peer counselor program at PMTCT sites in April 2009 during the project’s third year of existence. The project was already running PMTCT support groups in its facilities and was therefore able to call upon the leaders and other members of these groups to serve as peer counselors. Duties assigned to the peer counselors include ensuring all HIV-exposed infants receive DNA PCR testing, provision of health education to mothers attending the clinic, counseling on infant feeding, and follow-up of clients in the community. As of February 2010, there were 186 peer counselors active in 153 sites in Western Province.

The following key elements have led to the successful implementation of the peer counselor program:

- **Selection and recruitment.** Peer counselors were selected from existing support group members at each facility, with preference given to group leaders. The facility’s health workers led the recruitment and selection processes to promote facility ownership and involvement in the program.

- **Training.** Peer counselors were trained using the Foundation-produced Kenya peer counselors’ curriculum, which focuses on communication and counseling skills, patient confidentiality issues, as well as disease-specific information. The level of training provided to counselors varies depending on their level of knowledge as well as the specific roles and responsibilities they are assigned. (Note: As of this writing, the peer counselor curriculum is awaiting review by NASCOP, after which it can be used by other programs that wish to implement this promising practice.)

- **Routine reporting.** Peer counselors are trained in the use of data collection tools, such as Ministry of Health referral forms and a monthly reporting tool developed by the Foundation’s Kenya program staff. Monthly meetings include handing off reports to Foundation field officers, who then compile and forward them to PMTCT program officers. Standardized, routine reporting is critical for capturing the impact that the work of peer counselors is having on linking children and adults to HIV care and treatment services.

- **Supervision and support.** Foundation field officers provide supervision and mentoring for peer counselors. Counselors are supported to attend refresher courses and other HIV-related training on topics such as stigma reduction. In addition, peer counselors regularly attend program review meetings to foster open dialogue and problem solving between facility-based health professionals and volunteer counselors.

- **Remuneration.** As peer counselor activities expanded to more sites, a decision was made to provide formal remuneration to peer counselors. Counselors now receive a modest stipend each month, as well as reimbursement for food and transport, when they attend monthly meetings. As an added incentive, counselors who are successful in tracing those on ART who have defaulted (as shown by the reporting tool) receive reimbursement for food and transport expenses incurred during their tracing activities.

**Results**

Peer counselors ensure that all HIV-exposed infants receive DNA PCR testing by identifying and referring HIV-positive mothers during community- or health facility-based education sessions, and during home visits with mothers enrolled in PMTCT who have been lost to follow-up. The rise in demand for EID resulting from
these and other promotional efforts has led to an increase in the number of active sites certified to collect DBS samples. At the end of 2009, approximately 90% of all Foundation-supported PMTCT sites in Western Kenya were equipped to provide EID, with 62% classified as active (i.e., sending at least one sample each month). Figure 1 shows a steady increase in the number of PMTCT sites in Western Province offering EID during 2009, with a marked jump in the number of active sites during the April–June period after initiation of the peer counselor program.

From April through June 2009 when the program first began, 1,620 dried blood spot (DBS) samples were collected from HIV-exposed infants at PMTCT sites and sent to the Kenya Medical Research Institute/U.S. Centers for Disease Control and Prevention (KEMRI/CDC) laboratory in Kisumu for DNA PCR testing. Of the samples collected, 146 were positive for HIV. By the end of 2009, a total of 123 infants had been traced and enrolled into HIV care and treatment, representing 84% of those who tested positive. Among infants traced and not enrolled into care and/or treatment, five were traced to other partner sites and another five had died (either before or after starting treatment).

The peer counselor program has become an important source of care and support for adult and pediatric clients and has led to improvements in client follow-up and retention. These encouraging early results have prompted PMTCT sites to recruit additional counselors in the hope that they will help link even more children and mothers to HIV care and treatment services.

References

Figure 1. Number of PMTCT sites providing early infant diagnosis in Western Province, Kenya (January-December, 2009)

![Graph showing the number of PMTCT sites providing EID in Western Province, Kenya.](image)

Note: “Active site” is defined as a site sending at least one DBS sample during each month.
In Mozambique, a country with an HIV prevalence of 15%, an estimated 150,000 pregnant women are living with HIV. The Foundation has supported the Mozambique Ministry of Health (MOH) with PMTCT implementation since 2004 to ensure that HIV-positive mothers have access to services that can prevent transmission of HIV to their infants. In 2006, pediatric and adult HIV care and treatment were added to the list of supported services. By the end of 2009, the Foundation was working in four provinces and 37 districts, and had supported sites in initiating a total of 2,266 children under age 14 on ART, including 773 infants under one year of age.

The Foundation’s PMTCT program has made strides in reducing the risk of mother-to-child transmission by sponsoring child-at-risk clinics, which provide care for HIV-exposed infants and children, as well as twins, those who are malnourished, and other vulnerable groups. These clinics have been instrumental in the scale-up of early infant diagnosis of HIV-exposed infants using DNA PCR testing (see Box 1). Dried blood spot (DBS) samples are collected by the maternal and child health (MCH) nurses at the clinics and samples sent to one of two laboratories equipped to perform PCR analysis. Currently, 303 child-at-risk clinics in all of Mozambique perform early infant diagnosis. By the end of 2009, more than 30,000 DNA PCR tests were performed in the country’s two reference laboratories.

In 2009, the Foundation, together with provincial health directorates of four provinces, performed a quantitative, field-based evaluation to review the strengths and weaknesses of its program and to improve the continuum of care for HIV-positive children following early infant diagnosis. The evaluation comprised an analysis of data at various points along the continuum of care for HIV-exposed infants and children, including registration at the child-at-risk clinics, initiation of cotrimoxazole (CTX) prophylaxis, early infant diagnosis, monthly follow-up visits, retesting for HIV, referral to the care and treatment clinic, and initiation on ART.

The evaluation was conducted in eight health facilities in Maputo, Gaza, Nampula, and Cabo Delgado.
The Tanzania Ministry of Health and Social Welfare (MOHSW) recommends that all HIV-exposed infants be tested for HIV, regardless of whether or not their mother received PMTCT services. The national early infant diagnosis (EID) program, which began operating in 2007, is charged with implementing this policy by testing all HIV-exposed infants, as well as infants with unknown status, within the first four to six weeks of life using DNA PCR testing. In July 2008, the Foundation began supporting the MOHSW to scale up EID implementation in 34 facilities in four regions: Tabora, Shinyanga, Kilimanjaro, and Arusha. By the end of 2009, EID had been rolled out to a total of 90 hospitals and lower-level health facilities in these regions. Since the initial implementation of EID in Foundation-supported facilities, acceptance rates have been as high as 80% among HIV-positive mothers in the PMTCT program.

Slow PCR Turnaround Times Lead to Loss to Follow-Up

Despite the success of EID roll-out efforts, Foundation program data from April 2009 showed a low percentage of caregivers receiving PCR test results (less than 40%). This resulted in only 24% of treatment-eligible infants being initiated on ART. The often three-month turnaround time for samples to be returned to the health facility from the laboratory was unacceptably long. Mothers and caregivers who agreed to testing of their infants at initial immunization consultations (when infants are 4 to 8 weeks old) and were promised the results at their second visit still had to wait several more weeks for the test results. This was a source of frustration for both caregivers and health providers and contributed to loss to follow-up of HIV-exposed infants.

Analysis of this issue revealed that the slow turnaround times were due to transportation inefficiencies. In Tanzania, DNA PCR tests are conducted at four referral hospital laboratories that service the entire country. Dried blood spot (DBS) samples are sent to one of these four laboratories, a process usually led by a district EID focal person, who collects samples from all facilities within a district and arranges for their transportation once a month. Methods of transportation include public transport, hospital vehicles, or various modes of transportation employed by blood banks. The person assigned to this role is also responsible for retrieving results at the testing site and returning results to their respective facilities. The return trip for samples can be long and arduous, with some health facilities located more than 300 km away from the nearest referral laboratory and only accessible via unreliable local transportation. These inefficiencies led to many test results never making their way back to the health facility. For example, in October 2009 in Shinyanga region, out of 146 DBS samples sent to the referral laboratory, only 12 results were picked up and delivered back to the district facility.

Use of a Courier Service for More Efficient Transport

In mid-2009, the Foundation’s EID team addressed these challenges by contracting with a courier company capable of reaching facilities in both urban and rural districts. Drafting of the contract was led by the EID program director, who was instrumental in mapping efficient service routes, setting up collection points, and appointing a lead contact person in each district to organize pickup and delivery with the courier service.

TANZANIA:
Using a Professional Courier Service to Reduce Early Infant Diagnosis Turnaround Times

Juma Songoro (jsongoro@pedaids.org) and Aisa Muya

The Foundation’s Dr. Juma Songoro sits beside the First Lady of Tanzania during her visit to Tabora.
Low rates of identification of HIV-exposed infants, delayed HIV diagnosis, and low enrollment rates into HIV care and treatment services have all been significant obstacles to scaling up pediatric HIV care and treatment in Kenya’s rural Eastern and Western Provinces. Once children are identified as HIV-positive and/or enrolled into care, a major challenge to pediatric ART initiation is lack of access to immunological tests (i.e., CD4 count) and other baseline toxicity and disease-monitoring diagnostics.

Most district hospitals and lower-level health facilities in Kenya are not equipped to provide CD4, hematology, and liver function tests. Machines needed to conduct these tests are mainly located in large provincial hospitals or in select district-level hospitals in urban areas. As a result, many children who reside in rural areas do not have access to the diagnostics required for ART initiation in accordance with Kenya’s guidelines on pediatric HIV care and treatment. This has led to denial of access to ART for many children, leaving them vulnerable to a host of life-threatening HIV-related illnesses.

The Foundation began supporting the Kenyan Ministry of Health in implementing its national pediatric ART strategy in October 2005 in Eastern Province and in June 2006 in Western Province. At the time of program initiation, pediatric ART services were not offered at any public sector sites in Eastern Province and were accessible at only one site in Western Province.

Establishment of the Laboratory Network

As a first step, a laboratory network was established in each province to provide provincial health facilities with access to the required baseline diagnostic testing services without having to expand their own laboratory facilities. Through this network, sites providing care and treatment to HIV-exposed infants could send samples to one central testing facility on a weekly basis, with results collected the following week. Tests carried out by the network laboratories include CD4, hematology, and liver function.

Through the formation process of a new laboratory network, the Foundation sponsored a series of meetings to foster dialogue between laboratory and health facility staff. A doctor or nurse from the health facility, a laboratory representative, and, if applicable, the individual in charge of collecting samples from satellite clinics attended the meetings. Main points of discussion were the need to share laboratory sample transport and processing infrastructure and establishment of standard operating procedures for the laboratory network. Agreements were reached regarding which day of the week samples would be collected and results returned. To reduce testing turnaround times, a system was set up whereby clients could schedule a time in advance to have their samples collected and sent to a testing facility on the same day.

The Foundation supports transport of samples by providing fuel, a lunch allowance for drivers, and a staff person to accompany samples to ensure their safe delivery to the laboratory. Because Western Province enjoys shorter travel distances and better public transport, the Foundation covers the cost of public transport at a flat, predetermined rate, as well as a lunch allowance for staff accompanying the samples. For Eastern Province clinics, an agreement was reached to use health facility vehicles to transport the samples to the respective testing sites.

» continued on pg. 20
**Rwanda:**

Psychological and Social Support for Children on ART Strengthens Adherence and Gives Hope

*Angelique Fundi (afundi@pedaids.org) and Esperance Nikuze*

In Rwanda, support groups for children living with HIV and their families are offered as part of a national policy developed by Rwanda’s Center for Treatment and Research on AIDS, Malaria, Tuberculosis and Other Epidemics (TRAC Plus). In 2008, the Foundation began contributing to the provision of psychological and social support services for children at 22 pediatric HIV care and treatment sites. The support services program provides children on ART aged seven and older and their families with counseling, information, and life skills training to help them accept their HIV-positive status and cope with common challenges such as grief associated with losing family members, treatment adherence, and HIV-related discrimination.

The program also provides training for health-care workers in helping families with disclosure of HIV status to their children and in guiding families in how to emotionally support children living with HIV. Monthly support groups, organized by age, are held at health facilities and allow children and their parents/caretakers an opportunity to share their experiences and receive important health information and reinforcement. The Foundation provides financial support to facilities hosting these groups to cover the cost of additional staff time, educational materials, decorating pediatric counseling rooms, and therapeutic outings for the children. Currently, 605 children participate in these groups nationwide.

In partnership with TRAC Plus and with support from the U.S. Agency for International Development (USAID), the Foundation also organizes Ariel Children’s Camps for children aged 13 and older who are active members of the support groups. At the three-day camp, children share their feelings, get to know one another, and learn about health and HIV. Counselors of support groups are also invited to participate in camp sessions. The first two camps were held in July and December 2009 for a total of 68 children from 17 facilities. Two additional camps are planned for 2010.

“Fighting HIV/AIDS doesn’t consist only in giving medicines . . . We ask that actions like these ones [Ariel Camps] would continue and be accessible to all children”

—Anita Asiimwe, Executive Secretary of the Rwanda National AIDS Control Commission, at the close of the July 2009 Ariel Camp
Partnerships in Action:
Supporting National Roll-Out of Provider-Initiated Testing and Counseling for Children in Swaziland

The following activity profile demonstrates one of the many ways that the Foundation engages in strategic partnerships to strengthen the provision of HIV care and treatment for children and families in the countries it supports.

One of the key barriers to diagnosing and treating HIV infection in children is health providers’ lack of confidence in providing counseling to HIV-positive children and their families, including a reluctance to offer HIV testing to children. To address this challenge, the Foundation’s Swaziland program has been working to increase health-care worker skills and confidence in the provision of pediatric HIV testing, counseling, and support. In 2009, in collaboration with the Africa Network for Care of Children Affected by HIV/AIDS (ANECCA) and with support from Abbott Fund, the Foundation implemented a small pilot project to assess the feasibility of offering provider-initiated testing and counseling (PITC) to children and families at five maternal and child health clinics in the country. ANECCA conducted a two-week intensive course in counseling at the outset of the pilot to prepare health-care workers at the selected sites.

Results of the pilot revealed that provision of PITC to children is feasible, well accepted by families, and an effective method to identify HIV-positive children and family members and to enroll them into HIV care and treatment services. Specifically, 1,214 of the 1,225 (99%) children who, together with one or more caretaker, received counseling in the pilot project were tested for HIV. Of the children found to be HIV-positive, the program was able to document that the majority (88%) visited the ART site to which they were referred. Based on these results, the Swaziland Ministry of Health has asked the Foundation to assist in the roll-out of a national training program for pediatric PITC. Building upon the pilot project and with support from the Ronald McDonald House Charities, the Foundation hopes to reach many more HIV-positive children in need of treatment and support to help them live longer, healthier lives. The project will consist of three components: continued collaboration with ANECCA to establish a national training-of-trainers program targeting health-care providers working with children, creation of child-friendly spaces within existing health-care facilities, and strengthening of linkages with community-based organizations to ensure that support groups are accessible to families affected by HIV.

<table>
<thead>
<tr>
<th>LEVEL 4: Experienced Central Referral Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors (Specialists, GMOs, DMOs), Clinical Officers, Experienced Nurses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 3: Experienced Provincial Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors (Specialists, GMOs, DMOs), Clinical Officers, Experienced Nurses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 2: Experienced District Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors (DMOs, GMOs), COs, RGNs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 1A (Urban and Rural): Experienced Public Health Care Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses (RGNs, SCN, PCNs), Counselors</td>
</tr>
</tbody>
</table>

| LEVEL 1B (Community): CHWs, Volunteers, Peer Counselors, Treatment Supporters, CBOs |

---

**Zimbabwe:**
Clinical Mentorship to Support Decentralization of the National HIV/AIDS Care Program

Tichaona Nyamundaya (TNyamundaya@pedaids.org), Agnes Mahomva, Matthews Maruva, and Auxilia Muchedzi

In June 2008, the Foundation and other partners supported a national review of Zimbabwe’s HIV care and treatment program. One of the recommendations of this review was the establishment of a clinical mentorship (CM) program to support decentralization of services for pediatric and adult ART and opportunistic infection care. A technical working group (TWG) for CM was formed by Zimbabwe’s Ministry of Health and Child Welfare (MOHCW) to provide technical and managerial oversight for the development, planning, implementation, and monitoring of the CM program. The group was chaired by the MOHCW and co-chaired by the Foundation, and consisted of representatives from the World Health Organization (WHO), the Central Public Health Laboratory, the National AIDS Council, the Ministry of Primary and Secondary Education, the National Blood Centre, and the Ministry of Information, Broadcasting, and Cultural Affairs.

Results of the pilot revealed that provision of PITC to children is feasible, well accepted by families, and an effective method to identify HIV-positive children and family members and to enroll them into HIV care and treatment services. Specifically, 1,214 of the 1,225 (99%) children who, together with one or more caretaker, received counseling in the pilot project were tested for HIV. Of the children found to be HIV-positive, the program was able to document that the majority (88%) visited the ART site to which they were referred.

Based on these results, the Swaziland Ministry of Health has asked the Foundation to assist in the roll-out of a national training program for pediatric PITC. Building upon the pilot project and with support from the Ronald McDonald House Charities, the Foundation hopes to reach many more HIV-positive children in need of treatment and support to help them live longer, healthier lives. The project will consist of three components: continued collaboration with ANECCA to establish a national training-of-trainers program targeting health-care providers working with children, creation of child-friendly spaces within existing health-care facilities, and strengthening of linkages with community-based organizations to ensure that support groups are accessible to families affected by HIV.
A four-day learning visit to Swaziland was recently organized for the Foundation’s technical staff. This trip was an opportunity for staff from various countries to come together and share their ideas and experiences on improving PMTCT efficiency, follow-up of HIV-exposed infants and children, and implementation of provider-initiated counseling and testing.

The Swaziland program was chosen because of its high PMTCT coverage rates and documented success in active follow-up of HIV-exposed and HIV-infected infants and children (see Box 1). Three technical officers from South Africa, two from Mozambique, two from Rwanda, and one from Tanzania participated in the visit. In addition to learning from the successful practices in Swaziland, each country team also presented on their own experiences during daily debriefing sessions at site visits and at a national partner meeting with the Swaziland Ministry of Health (MOH).

**Ingredients for Success**

A key component of Swaziland’s success in scale-up of HIV care and treatment services is routine communication between health-care facilities and the MOH. Regular meetings are organized among clinicians and MOH contacts to discuss current progress and gaps and to learn about the newest and best treatment options.

Site visits by Foundation technical staff are regularly performed, and standardized in-service and on-site training is offered to all nurses in PMTCT, ART, PCR testing, as well as counseling. Training in drug supply management is also provided at each health facility to prevent drug shortages. Staff support has been further strengthened through the hiring of much-needed counselors and midwives. In addition, public health units and health centers have designated focal persons to coordinate regular, multidisciplinary team meetings to discuss the entire spectrum of HIV care and treatment services.

Data tracking and the employment of registries at health-care facilities have also led to improvements in the quality of care. For example, facilities use pre-ART and ART registries to track client status and control loss to follow-up, and computer data clerks track all patient data electronically. “Complementary” registries are also used to track PCR test results and trace patients enrolled in ART.

To increase enrollment, many facilities have enlisted doctors from high-volume ART clinics to visit MCH facilities and enroll eligible pregnant women and children in the ART program. To limit loss to follow-up, mobile phones or phone cards are provided to health care workers to help them track patients.

**Next Steps**

Debriefing sessions were held following each site visit where visiting country officers had the opportunity to discuss their own work and ideas for future actions. Each of the parties contributing to this visit has made a commitment to incorporate some of the best practices observed in Swaziland in their home countries (see Box 2).

**Box 1. About the Foundation’s Swaziland Country Program**

- PMTCT services have been supported since 2004 and are currently supported at 47 facilities (public hospitals, public health units, health centers, and clinics).
- Pediatric HIV care services, including early infant diagnosis, are supported at 35 sites, with 34 of these sites supported through training and mentoring to provide early infant diagnosis.
- Pediatric ART is supported at three of the six public health units, with a plan to scale this up to all six in 2010.
- All Foundation-supported health facilities are integrating PMTCT and HIV care and treatment services in MCH settings.

**Box 2. Next Steps for Participating Foundation Country Programs**

- Mozambique would like to implement provider-initiated testing and counseling.
- Rwanda will plan to initiate ART in the PMTCT setting. It will also continue to strengthen antenatal care and immunization services and hopes to have immunization and PCR testing provided on the same days at the same locations.
- South Africa will start mentoring their primary health-care physicians. A proposal to administer pediatric ART at the primary health level is currently under consideration.
- Tanzania will initiate MCH/HIV integration in at least two sites per region.
An Evaluation of the Continuum of Care for HIV-Exposed Infants

Provinces and examined the records of 423 HIV-exposed infants and children who enrolled in the child-at-risk clinic between October 2008 and June 2009. Data sources included patient files, registers, and an electronic patient database. Data were then organized into Excel spreadsheets, and simple analyses, such as proportions and median, were performed.

Evaluation Findings

A summary of the evaluation findings is presented in Box 2. Overall it was found that early infant diagnosis was frequently being offered at the child-at-risk clinics, with 63% of infants tested using DNA PCR at an average age of 2.1 months. However, turnaround times for PCR test results were noticeably long, with...
an average turnaround time to the health facility of 50 days. Ultimately, only 65% of positive PCR test results were received by the mother or caretaker.

It should be noted that this evaluation has limited generalizability due to its small sample size. Analyses relied on retrospectively collected data, which can result in measurement bias. Despite these limitations, this simple, low-cost assessment has shed light on the quality of PMTCT and pediatric HIV care and treatment services in Mozambique and needed improvements. It is hoped that, with additional training, both Foundation and MOH staff can replicate this exercise on a regular basis to continuously improve the continuum of care for HIV-exposed infants.

Recommendations

- It is critical to strengthen follow-up of HIV-exposed infants and early infant diagnosis during postnatal care (0–18 months).
- Nurses and lay counselors should reinforce the importance of continued CTX prophylaxis and retesting through individual counseling sessions and through prenatal support groups.
- Additional training and supportive supervision are necessary to improve the quality of counseling and to ensure speedy and effective delivery of diagnoses.
- Emphasis should be placed on the importance of recording services provided to avoid underestimation of the number of mother-infant pairs receiving follow-up care.
- To increase access to treatment and support, lay counselors and volunteers should perform home visits for mother-infant pairs lost to follow-up, prioritizing mothers who are ART-eligible with low CD4 counts and children with positive PCR test results.
- In closing the gap between health-care facilities and communities, community-based organizations, and peer volunteers in particular, may be useful in tracing HIV-exposed infants and children who have been lost to follow-up.
- To facilitate referrals, lay counselors at MCH sites can actively refer children to HIV care and treatment sites, thereby ensuring that children and their caregivers receive a clinical consultation on the same day as their HIV diagnosis.

Next Steps

The Foundation is currently working with staff at well-child clinics to encourage routine referral of infants with uncertain exposure status to the child-at-risk clinic and to ensure that any HIV-exposed infants seen for vaccinations receive proper care. The Foundation is also working with the MOH to combine well-child care and the child-at-risk clinic into one integrated service to reduce loss to follow-up observed in the latter.

Some health facilities have found it helpful to integrate HIV care and treatment and MCH services. MCH nurses have begun initiating ART in children with a positive PCR test result under the regular supervision of a physician. This task-sharing approach can reduce waiting times and the number of required visits. It is hoped that it may lead to increases in the number of HIV-positive children receiving ART.

References

Using a Professional Courier Service to Reduce Early Infant Diagnosis Turnaround Times

By December 2009, the courier system had been successfully implemented in all four regions. DBS samples are now sent to referral laboratories at least two times each month, and there is a dramatic decrease in turnaround times observed, from an average of two to three months to three to five weeks. This has led to more clients receiving their results. In the Shinyanga region, where only 25% of mothers and caregivers were receiving their test results prior to the use of the courier system, 62% are now receiving their results at their second clinic appointment. Significant reductions in PCR turnaround times have led to more HIV-positive infants being promptly diagnosed and enrolled into HIV care and treatment services.

Clinical Mentorship to Support Decentralization of the National HIV/AIDS Care Program

The Foundation provided technical support for two workshops in Harare during May and June 2009. The objectives of the first workshop were to educate key stakeholders on WHO CM guidelines and training materials and to share experiences from other CM programs in Southern Africa. A total of 20 participants discussed possible options for implementing the program in Zimbabwe and agreed upon a framework for the national guidelines and training materials. The second workshop consisted of training for 16 prospective mentors.

The Zimbabwean CM model is designed to fit within the national tiered health-care delivery system (see Figure 1). An initial six-month pilot program is being planned for Manicaland, Mashonaland Central, Matabeleland South, and Matabeleland North Provinces, and for the city of Harare. Outcomes of this pilot will be used by the CM TWG to assess the feasibility of national roll-out of the CM model.
Not surprisingly, the prompt delivery of test results significantly increased the workload at both Foundation-supported health facilities and referral laboratories. The Foundation therefore began providing salary support for additional laboratory staff at the referral facilities, as well buffer stock of reagents, to ensure that the smooth running of the laboratory networks was not interrupted by staff shortages or stock-outs.

Results
As of the end of December 2009, the Foundation was supporting three laboratory networks in Eastern Province, each with a CD4 machine, that were enabling 29 ART sites to provide timely diagnostic services to their clients. In Western Province, eight laboratory networks with CD4 machines now support 53 satellite ART sites and 277 PMTCT sites. All Foundation-supported sites in Western Province are networked to the referral laboratories.

One positive outcome of the program has been the high numbers of children accessing pediatric HIV care and treatment services. By the end of December 2009, a total of 2,781 children had been initiated on ART since the introduction of the networks and 2,331 were reported as currently on ART in Eastern and Western Provinces combined.

A gradual increase in the number of children under the age of 14 newly initiated on ART after establishment of the laboratory network is seen in a yearly comparison of the third quarters of 2007, 2008, and 2009 (see Figure 1). The volume of samples being processed has grown significantly as well, with a total of 4,378 samples processed by networks in the two districts between July and September of 2009. An estimated 15% overall increase in total program costs in the two provinces has resulted from the addition of these diagnostic services. Costs incurred included staff time and expense reimbursements, equipment (e.g., boxes and Vacutainers), and buffer stock of reagents.

The use of laboratory networks has demonstrated that it is possible to provide the basic diagnostic services required for pediatric ART initiation in a cost-efficient manner. Through sharing of resources, the need to recruit and train additional laboratory technicians to cope with the resultant increase in workload has been minimized.

The network also eliminates the need to purchase CD4 and other expensive diagnostic equipment for every PMTCT and HIV care and treatment site. Most importantly, these networks have the potential to reduce loss to follow-up through shortened turnaround times that ensure more young clients receive their results and begin treatment early, when it can have the maximum beneficial effect.

Figure 1. Number of children under the age of 14 newly initiated on ART in Eastern and Western Provinces after establishment of laboratory networks (comparison of third-quarter data, July 2007 to September 2009)
Technical Team Updates

GLOBAL TECHNICAL POLICY

Maternal-Child Health and HIV Integration Initiative

The Foundation launched its MCH/HIV Integration Initiative in January 2010. The initiative’s overarching goal is to optimize health outcomes for women, children, and families by strengthening essential MCH services, including reproductive health, safe motherhood, and well-child care. The MCH/HIV technical advisory group (“M-TAG”) began meeting regularly in February and is currently developing position statements, a position paper, an MCH/HIV integration framework, and other helpful resources and tools for the Foundation. The M-TAG will convene a colloquium in late April (see Calendar listings) to share country experiences and lessons learned in the area of MCH/HIV integration. The purpose of the colloquium is to help define the way forward for the Foundation in the integration of MCH and HIV. For more information on this initiative, contact Cori Mazzeo at cmazzeo@pedaids.org or Elizabeth Flanagan at eflanagan@pedaids.org.

The WHO Guideline Revision Country Adaptation and Program Implementation Initiative

A new technical advisory group (TAG) has been formed to continue the work of the recently phased-out ARV Regimens TAG with a broader focus. Given the tremendous work that needs to be carried forward to adapt and implement the revised WHO guidelines in all four technical areas (PMTCT, Infant and Young Child Feeding, Pediatric HIV Care and Treatment, and Adult HIV Care and Treatment), the WHO Guideline Revision Country Adaptation and Program Implementation Initiative (known as WHO TAG), which launched in February 2010, will support country teams in adopting and implementing the revised guidelines in their respective countries. The first implementer’s tool kit, Revised WHO Guidelines/Adaptation and Understanding Implications for National Policies, was launched by the WHO TAG at the Foundation’s Quality Improvement Conference in Grand Bassam, Côte d’Ivoire, in late January 2010. Countries have already begun using the tool kit as they engage in national working groups and meetings with ministries of health. Although the first tool kit is focused on PMTCT, an integrated tool kit including the other three technical areas will be released in April 2010. WHO TAG has scheduled a meeting May 5–6, 2010 in Johannesburg, South Africa, for technical directors that will focus on the revised WHO guidelines. For more information on this initiative, contact Elena Ghanotakis at eghanotakis@pedaids.org.

Writing Workshops

Three writing workshops were held for Foundation country program staff in Mozambique and Kenya in February. The Mozambique workshops mark the first to be held in a language other than English.
Technical Team Updates (continued)

Translation of the Portuguese curriculum was led by Caroline de Schacht and Jessica Rodrigues of the Mozambique country team, who also served as lead facilitators for the Mozambique workshops. The curriculum has also recently been translated into French, and francophone workshops will take place in early June in Côte d’Ivoire and Rwanda. A condensed version of the writing workshop for U.S.-based staff is planned for June 22–23 in Washington, D.C. For more information, contact Sara Teitelman at steitelman@pedaids.org.

From the Ground Up

A very positive independent review of the Foundation’s three-volume publication, From the Ground Up: Building Comprehensive HIV/AIDS Care Programs in Resource-Limited Settings, was published in the peer-reviewed journal The Lancet on March 20. More information about the publication as well as on online ordering is available at: https://ftgu.pedaids.org. Books and CD-ROMs can also be picked up at the Foundation’s Washington, D.C., and Los Angeles offices and will be arriving in the Foundation’s country offices shortly. Questions regarding From the Ground Up may be sent to ftgu@pedaids.org.

MONITORING AND EVALUATION

The Foundation’s country programs have been working with ministries of health, partners, and donors during the last four months to identify ways in which the Foundation can enhance monitoring and evaluation (M&E) systems at the national, provincial, district, and site levels. These activities have been supported by on-site technical assistance provided by global M&E staff members to Foundation-supported facilities in Côte d’Ivoire, Zambia, Tanzania, Swaziland, South Africa, and Cameroon. A major challenge in the strengthening process of the systems is the lack of on-site capacity to collect...
and report high-quality data. To address this challenge, M&E staff is working to standardize data collection, management, and auditing procedures at the country and global levels. Assisting in the formation of standard operating procedures (SOPs) and tools for data collection and use in Zambia and South Africa is already underway. Another major challenge is limited coordination between government and international partners in the development and implementation of M&E tools and systems. At Foundation-supported programs in Swaziland, Côte d’Ivoire, and Cameroon, there has been active communication with ministries of health and donors to develop data-quality protocols and SOPs to harmonize M&E terms and tools.

**PREVENTION, CARE, AND TREATMENT SERVICES**

The Prevention, Care, and Treatment Services (PCTS) team held a retreat February 22–24, 2010, in Washington, D.C. The goals of the retreat were to develop a clear and achievable PCTS work plan for 2010, outline plans to integrate current Foundation priorities into the work plan, strengthen PCTS capacity to perform its core functions, and continue to build the team’s sense of pride in its work. For 2010, the team will focus its efforts on three Foundation priorities: increasing numbers of children enrolled in HIV care and treatment, supporting the implementation of revised WHO guidelines, and documenting the achievements of the Foundation’s country programs.

**RESEARCH**

In collaboration with the Centers for Disease Control and Prevention (CDC) and the Côte d’Ivoire Ministry of Health, the Foundation is conducting an evaluation of the national HIV care and treatment program in Côte d’Ivoire. Public health evaluations conducted during the initial scale-up of a program are critical to assess best practices and further expansion efforts. The purpose of the evaluation is to assess the clinical and immunological outcomes of ART scale-up and to quantify and fully evaluate treatment retention rates since 2004. In addition, the project will assess health-care worker satisfaction with the program.

Planning for the project started in 2006. Three protocols targeting different populations of adults and children on ART have been developed. The evaluation is a retrospective review of data abstracted from nationally representative samples of medical records and interviews with key health-care workers at 60 randomly selected HIV care and treatment sites throughout the country.

The study was launched in September 2009 after receipt of institutional review board (IRB) approvals and staff trainings on SOPs. To date, more than 7,000 patient charts have been reviewed at 59 sites. Preliminary results of the study are expected in June 2010 and will undoubtedly shed some light on the health outcomes of adults and children on antiretroviral therapy and the main factors associated with retention and loss to follow-up in the Côte d’Ivoire program. For more information about this activity, contact Georgette Adjourlolo-Johnson at gajohnson@pedaids.org.
Q&A with…

Martha Mukaminega

Dr. Martha Mukaminega is the Foundation’s Deputy Director of Pediatric Care and Treatment and is based in Kigali, Rwanda. In this role she provides technical assistance to the Foundation’s country programs (with a special focus on French-speaking countries) to support improved early identification, enrollment, and retention of HIV-positive infants and children. By engaging in training and operations research in the area of pediatric HIV care and treatment, as well as documentation of these efforts, Martha has facilitated collaborations between Foundation country teams and national ministries of health, local departments of health, and other implementing partners in the development of local guidelines and policies that support children living with HIV. In addition, Martha serves on the Rwanda Pediatric Technical Working Group as a technical resource. She is a pediatrician by training and has used her medical and technical expertise in the field of pediatric HIV care and treatment to strengthen multiple Foundation-supported country programs.

How long have you been with the Foundation?
Since December 2006, first as technical director of the Foundation’s Rwanda program.

Which living person do you most admire?
Nelson Mandela, for his leadership.

What do you consider your greatest achievement?
To have given hope and a normal life to HIV-positive children, first as a clinician and later as a member of the Foundation. Most of these children are doing well in school and in working life, and, most importantly, they are smiling.

What is the quality you most value in your colleagues?
Commitment and honesty.

What profession other than your own would you like to attempt?
I would like to be a lawyer and defend those without the means to defend themselves.

Which talent would you most like to have?
Strong leadership skills.

What do you like to do for fun?
Walk with groups of friends and listen to good music.

What is your favorite public health word or phrase?
We have achieved great success in improving child survival among young people living with HIV, but there is still much to be done.

What is your least favorite public health word or phrase?
When challenges occur, it is better to just give up.

What is the most challenging aspect of your work?
Knowing that infants are still being infected with HIV when these infections could have been prevented.

What is the most rewarding aspect of your work?
Supporting health-care providers and contributing to the improvement of pediatric HIV care.

What is your professional motto?
“Whatever I have achieved, it is always possible to do better.”
Calendar of Events

**International and Regional Meetings**

**4th INTEREST Workshop**  
May 25–28, 2010 | Maputo, Mozambique

The annual INTEREST Workshop (International Workshop on HIV Treatment, Pathogenesis and Prevention Research in Resource-Limited Settings) was launched in 2007, spearheaded by Prof. Joep M.A. Lange and Prof. Charles Boucher and supported by a prominent panel of developing and developed country experts in the field of HIV/AIDS. These focused meetings are an opportunity for specialists in the field of HIV prevention and treatment to share their knowledge and views with one another. http://www.virology-education.com/index.cfm/t/4th_INTEREST_Workshop

**Women Deliver 2010**  
June 7–9, 2010 | Washington, D.C., USA

The theme of this year's conference is *Delivering Solutions for Girls and Women*, and the conference will focus on political, economic, social/cultural, and technological solutions. This global meeting will expand on Women Deliver's hallmark of inclusivity, reaching out to new partners and new communities. Having all these partners in one room will further prove that maternal and reproductive health is a global priority. http://www.womendeliver.org/conferences

**The Global Health Council Conference**  
June 14–18, 2010 | Washington, D.C., USA

On June 14, 2010, more than 2,500 practitioners, global health and world leaders, activists, multilateral organizations, public and private sector institutions, members of academia, and researchers will descend upon Washington, D.C., to discuss global health goals and metrics at the Global Health Council’s 37th Annual International Conference. http://www.globalhealth.org/conference_2010/

**5th International HIV Transmission Workshop: Principles of Intervention**  
July 15–16, 2010 | Vienna, Austria

The main objectives of this meeting are to provide a forum for scientists, clinicians, virologists, epidemiologists, and public health officials to present and to discuss the various aspects of the transmission of HIV. The ultimate goal of the meeting is the integration of efforts from all relevant disciplines in order to constrain the spread of (drug-resistant) HIV. http://www.virology-education.com

**2nd International Workshop on HIV Pediatrics**  
July 16–17, 2010 | Vienna, Austria

*Supported by the Elizabeth Glaser Pediatric AIDS Foundation*

The 2nd International Workshop on HIV Pediatrics will present a unique and much-needed platform for international exchange on this important topic. The workshop will be abstract driven and will bring together experts from different disciplines involved in clinical care for infants and children. The ultimate goal of the workshop is to cultivate better treatment methods and strategies for infants and children in developed and developing countries. http://www.virology-education.com
International and Regional Meetings (continued)

Children and HIV: Family Support First
July 16–17, 2010 | Vienna, Austria

Children and HIV: Family Support First—Working Together to Achieve Universal Support and Access to Treatment is an international symposium that will present the latest evidence and models on family-centered care and services for children affected by HIV and AIDS. The underlying theme for the symposium is based on the findings of the Joint Learning Initiative on Children and HIV/AIDS, which demonstrated that families are both central and undersupported in their care of children affected by HIV and AIDS.
http://www.hivamu.org/2010

XVII International AIDS Conference
July 18–23, 2010 | Vienna, Austria

The theme of the 2010 International AIDS Conference ("AIDS 2010") is Rights Here, Rights Now. The conference, which is held every two years, will present new scientific knowledge and offer many opportunities for structured dialogue on the major issues facing the global response to HIV. A variety of session types, from abstract-driven presentations to symposia, bridging sessions, and plenaries, will meet the needs of various participants. The Foundation will have a significant presence at this year’s conference, including informative satellite sessions and skills-building workshops, as well as a number of oral and poster presentations. More details on Foundation activities at AIDS 2010 will be included in the next issue of Habu Na Haba. http://www.aids2010.org

26th International Pediatric Association Congress of Pediatrics
August 4–9, 2010 | Johannesburg, South Africa

The congress will feature a wide spectrum of the latest information ranging from the most avant-garde science to the priorities facing resource-limited settings. Occurring just five years before the due date of the Millennium Development Goals, with their target of reducing child mortality by two-thirds by 2015, this congress will provide crucial insight into vital issues of child health throughout the world. http://www2.kenes.com/ipa/Pages/Home.aspx

138th American Public Health Association Annual Meeting & Exposition
November 6–10, 2010 | Denver, Colorado, U.S.A.

The APHA Annual Meeting & Exposition is the oldest and largest gathering of public health professionals in the world, attracting more than 13,000 national and international physicians, administrators, nurses, educators, researchers, epidemiologists, and related health specialists. APHA's meeting program addresses current and emerging health science, policy, and practice issues in an effort to prevent disease and promote health. http://www.apha.org/meetings/
**Foundation Events**

**Maternal-Child Health and HIV Integration Initiative Colloquium**  
April 27–29, 2010 | Lusaka, Zambia

Based on the successful experience of the ARV regimens and infant and young child feeding (IYCF) colloquia in 2009, the Foundation will convene a technical exchange meeting (colloquium) on MCH/HIV integration. The purpose of the meeting is to provide technical updates on key MCH topics, share promising practices and experiences across Foundation countries, react to and discuss technical advisory groups’ outputs, define key gaps in MCH in Foundation-supported programs, and discuss global Foundation implementation strategies and country-specific plans of action. For more information, contact Courtney Johnson at cjohnson@pedaids.org.

**Country Directors’ Meeting**  
May 1, 2010 | Maputo, Mozambique

The country directors from all 12 presence countries will converge in Maputo for one of their regular meetings to discuss strategies to improve our programs, funding opportunities, and share best practices. For more information, contact Julianna Hills at jhills@pedaids.org.

**Corporate Services Meeting**  
May 2–6, 2010 | Maputo, Mozambique

Corporate Services staff from across the Foundation’s offices will gather in Maputo for this annual conference, which focuses on best practices and lessons learned from the field, presentations from Programs and New Business, as well as policy and management updates from the various functional units, including Human Resources and Administration, Accounting, Financial Planning and Analysis, Audit, Awards and Compliance, and Information Technology. For more information, contact Julianna Hills at jhills@pedaids.org.

**Technical Support Meeting: WHO Revised Guidelines**  
May 5–6, 2010 | Johannesburg, South Africa

This two-day meeting will provide a forum to share country experiences, navigate challenges and issues that have been raised, and provide overall support to countries in the adaptation and roll-out of the revised WHO guidelines. The meeting will include a review of the implementation planning tools to be included in the Phase II tool kit focused on implementation planning associated with the revised WHO guidelines. Country directors, technical directors, and other technical staff from the Foundation's country programs will be in attendance. For more information, contact Allison Spensley at aspensley@pedaids.org or Elena Ghanotakis at eghanotakis@pedaids.org.

**Board Meeting**  
June 12, 2010 | Los Angeles, California, U.S.A.
Haba Na Haba is a quarterly publication of the Elizabeth Glaser Pediatric AIDS Foundation. We welcome feedback and contributions from all Foundation staff. Please send questions, comments, or content submissions to techbulletin@pedaids.org.

Executive Editor: Christian Pitter
Managing Editor: Sara Teitelman
Associate Editor: Alex Eblom
Contributing Editors: Cori Mazzeo, Elena Ghanotakis
Document Design: Susan Gillham
Production: Matt Meyerchak, Juanita Cote