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PREVENTING PEDIATRIC HIV INFECTIONS AND IMPROVING THE HEALTH OF WOMEN & FAMILIES

THE USAID-SUPPORTED EXPANSION OF THE MTCT-PLUS INITIATIVE



SUB-SAHARAN
AFRICA

2003-2010

ACRONYMS

AIDS	acquired immune deficiency syndrome
AMPATH	Academic Model Providing Access to Healthcare
ANC	antenatal care
APS	adherence and psychosocial support
ART	antiretroviral therapy
ARV	antiretroviral [drugs]
CDC	US Centers for Disease Control and Prevention
DBS	dried blood spot
DHMT	district health management team
DNA	deoxyribonucleic acid
EID	early infant diagnosis
FY	fiscal year
HAART	highly active antiretroviral therapy
HCT	HIV counseling and testing
HCW	health care worker
HIV	human immunodeficiency virus
ICAP	International Center for AIDS Care and Treatment Programs
M&E	monitoring & evaluation
MCH	maternal and child health
MDT	multidisciplinary [health care] team
MIPA	meaningful involvement of people living with HIV/AIDS
MOH	ministry of health
MSPH	Mailman School of Public Health [at Columbia University]
MTCT	mother-to-child transmission [of HIV]
NGO	nongovernmental organization
PCR	polymerase chain reaction
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission [of HIV]
POC	package of care
S2S-I	South-to-South Partnership for Comprehensive Pediatric HIV Care and Treatment Program, Phase I
S2S-II	South-to-South Partnership for Comprehensive Family HIV Care and Treatment Program, Phase II
sd-NVP	single-dose nevirapine
SOC	standard of care
STI	sexually transmitted infection
TB	tuberculosis
TBA	traditional birth attendant
TWG	technical working group
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
USG	United States Government
VHW	village health worker



LEFT A mother holds her baby while a nurse takes a blood sample.

NEXT PAGE Women and children gather in the waiting area of Same District Hospital in the Same District of Tanzania.

PHOTO BY CASEY KEILBAUGH

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PHOTO BY NATHAN GOLON



Enhancing quality care and treatment services for entire families is a lasting, vital link in the long-term success of pediatric HIV prevention programs.

PREVENTING PEDIATRIC HIV INFECTIONS AND IMPROVING THE HEALTH OF WOMEN & FAMILIES

THE USAID-SUPPORTED EXPANSION OF THE MTCT-PLUS INITIATIVE, 2003-2010

A mother and her healthy three week old infant

The Impact of HIV on Women and Children

THE HIV EPIDEMIC PRESENTS an unprecedented challenge to maternal and child health in sub-Saharan Africa. There, of the more than 22 million people living with HIV, 60% are women.¹ Because this devastating virus is transmitted within families, between husband and wife, and from mother to child, families are particularly vulnerable—especially infants and young children. To reduce mother-to child transmission (MTCT) risk and preserve families and communities,



WOMEN'S HEALTH: A VITAL PLATFORM FOR PREVENTING PEDIATRIC HIV INFECTION AND PRESERVING THE HEALTH OF FAMILIES

women and children need access to quality services for maternal and child health and for lifelong HIV care and treatment for their partners as well as themselves.

Access to prevention of mother-to-child transmission (PMTCT) services has improved over time. Nonetheless, 370,000 children under age 15 became infected with HIV in 2009.² Given the high risk of early mortality for children with HIV infection and the challenges of successfully engaging in long-term HIV care and treatment, preventing children from acquiring HIV is essential. Central to the success of PMTCT initiatives are the recognition of the intimate connection between a mother's own health status and the health outcomes of her children and the understanding that antiretroviral therapy (ART) for pregnant and breastfeeding women with more advanced HIV infection not only diminishes illness and death in women but also prevents infections in children. What is good for mothers is also good for their children.

1. UNAIDS. *UNAIDS Report on the Global AIDS Epidemic, 2010*. Accessible at: http://www.unaids.org/documents/20101123_Global-Report_em.pdf.

2. UNAIDS. *UNAIDS Report on the Global AIDS Epidemic, 2010*. Accessible at: http://www.unaids.org/documents/20101123_Global-Report_em.pdf.

PMTCT Successes and Challenges

Over the past decade, despite significant challenges, the global expansion of PMTCT and HIV care and treatment programs has been dramatic. This expansion is particularly evident in sub-Saharan Africa. Efforts to identify HIV-infected women during pregnancy and reduce the risk of mother-to-child transmission of HIV, primarily via prophylactic antiretroviral regimens, have made important inroads in preventing new pediatric HIV infections. By the end of 2009, more than half of the 1.4 million pregnant women living with HIV had received antiretroviral drugs (ARV) for PMTCT, up from 15% in 2005. Despite these successes, however, many countries continue to use less-efficacious PMTCT antiretroviral regimens and fail to engage pregnant women identified as HIV positive in HIV care services. Hence, many pregnant women who are eligible for HIV treatment for their own health are not starting lifelong ART. Further, only 35% of HIV-exposed infants received ARV for PMTCT in 2009, and only 15% received an HIV diagnostic test within the first two months of life.³

3. WHO/UNAIDS/UNICEF (2010). *Towards Universal Access: Scaling Up Priority HIV/AIDS Interventions in the Health Sector. Progress Report*

The Approach of ICAP and the Expanded MTCT-Plus Initiative

Enhancing quality care and treatment services for entire families is a lasting, vital link in the long-term success of pediatric HIV prevention programs. Yet few programs in resource-limited settings have recognized the unique potential of PMTCT programs as an entry point to lifelong HIV care and treatment for pregnant women, children, and family members. The Expanded MTCT-Plus Initiative provides a leading example of the feasibility and benefits of such integration.

Established in 2002, the MTCT-Plus Initiative was one of the first multicountry HIV care and treatment programs in sub-Saharan Africa.⁴ At the time, it was widely believed that ART was not feasible in low-resource settings; prevention programs, particularly those focusing on PMTCT, were viewed as the best approach to containing the epidemic. Where PMTCT programs were established, pregnant women were tested for HIV and those who were found to be HIV positive were given a single dose of the antiretroviral drug nevirapine for themselves and their infants for PMTCT. HIV treatment was not available for the woman or the child who acquired HIV infection. Recognizing the critical importance of addressing the health needs of the woman and her family, the MTCT-Plus Initiative used the PMTCT platform to establish long-term treatment services for pregnant and postpartum women, their children, and all family members living with HIV. Believing that keeping mothers healthy would result in lower MTCT rates as well as improved long-term outcomes for family members, the MTCT-Plus Initiative pioneered a family-focused approach to HIV care, treatment, and prevention. Pregnant and newly postpartum women were enrolled through their local PMTCT

2010. Geneva, Switzerland: WHO/UNAIDS/UNICEF. Available at: <http://www.who.int/hiv/pub/2010progressreport/report/en/index.html>.

4. Abrams EJ, Myer L, Rosenfield A, El-Sadr WM. Prevention of mother-to-child transmission services as a gateway to family-based human immunodeficiency virus care and treatment in resource-limited settings: rationale and international experiences. *Am J Obstet Gynecol*. 2007;197(3 Suppl):S101-106.

programs and offered HIV care and treatment; services were extended to their husbands, partners, children, and other household and family members.

The MTCT-Plus Initiative was established with the generous support of a number of foundations committed to the health of women, children, and families. In 2003, US Agency for International Development (USAID) took the bold step to expand the vision and mission of the initiative, and the International Center for AIDS Care and Treatment Programs (ICAP) was awarded a USAID cooperative agreement for "Expanding the MTCT-Plus Initiative." This report, a summary of work performed under the agreement, highlights the successes and lessons learned from the expanded initiative and suggests a way forward to continue to meet the needs of women, children, and families affected by HIV and to continue to prevent new pediatric HIV infections.

Women and children wait to receive maternal child health services at Huruma Designated District Hospital in the Rombo District of Tanzania.





PHOTO BY LUCAS ROBINSON

Patients wait their turn to receive treatment at a clinic located several kilometers from Kigali, Rwanda.

CROSS-CUTTING PRINCIPLES, APPLIED ACROSS ACTIVITIES

- High quality of care
- Strengthening systems, at all levels
- Sustainability
- National ownership
- A family-focused approach
- A multidisciplinary approach

MAJOR FOCUS AREAS

- Increasing access and improving systems
- Increasing uptake and improving retention
- Improving the quality of care
- Extending services to the entire family
- Strengthening community linkages and the continuum of care

GOALS OF THE EXPANDED MTCT-PLUS INITIATIVE

- Prevent pediatric HIV infections.
- Support implementation of integrated, comprehensive, family-centered HIV care and treatment services and reduce HIV-related morbidity and mortality among women, children, and partners.
- Enhance and strengthen public health system capacity (at community, health facility, district, and national levels) to provide quality family-centered HIV care and treatment services.

Under MTCT-Plus protocols, all family members, including children, partners, and household members, are offered services, empowering the woman to bring her family into the circle of care.

Figure 1: Countries addressed in this report (in gold)



death. These same women are also at highest risk for transmitting infection to their babies. Initiating lifelong ART in women with advanced HIV infection, beyond provid-

THE MTCT-PLUS INITIATIVE: GOALS, MODEL OF CARE, AND LEVELS OF SUPPORT

The MTCT-Plus Model Of Comprehensive Care

THERE IS STRONG EVIDENCE for linking and integrating PMTCT and HIV care and treatment services to offer a continuum of care to mothers, babies, and families. For the woman, this begins with HIV testing during antenatal care (ANC), continues throughout pregnancy and during labor and delivery, and extends for her lifetime as she engages in comprehensive HIV services. For the baby, care begins at birth and continues until a final infection status is defined and the child is either enrolled in HIV treatment services or determined uninfected through early infant diagnosis (EID) and subsequent testing after weaning. The key concept within the model is the integration of prevention and treatment. Women with advanced HIV infection are at highest risk of disease progression and

ing PMTCT regimens, improves mothers' health and lowers the risk of HIV transmission. The MTCT-Plus model also recognizes HIV as a family disease—the pregnant woman is rarely the only family member suffering from infection. Under MTCT-Plus protocols, all family members, including children, partners, and household members, are offered services, empowering the woman to bring her family into the circle of care. Acknowledging the importance of high-quality health services to families living with HIV, the MTCT-Plus model strives to enhance and strengthen public health system capacity to provide them. With USAID support, the Expanded MTCT-Plus Initiative at ICAP supported nine countries in sub-Saharan Africa in implementing HIV prevention, care, and treatment services. The initiative has been recognized internationally as the model program for family-based care. The program activities initiated high quality services that have resulted in many lives saved.

Levels and Types of Support Provided

Women living with HIV infection and their children and partners require lifelong clinical care and ongoing adherence and psychosocial support. To meet these needs, ICAP collaborates closely with host governments in the development of appropriate systems and services. ICAP's Expanded MTCT-Plus Initiative supported and carried out activities on four levels.

SUPPORT AT THE NATIONAL LEVEL

Strong collaboration with national governments—especially ministries of health (MOH) and their partners, including PEPFAR partners and local organizations—ensures that activities align with governments' needs and goals and promotes country ownership. Illustrative national-level activities in the Expanded MTCT-Plus Initiative include:

- **Supporting the development of national plans, policies, and guidelines**—for example, by ensuring timely integration of revised WHO recommendations into national guidelines and policies.

- **Developing and strengthening systems** to deliver MTCT-Plus services, including laboratory systems, systems for supply chain management and for monitoring and evaluation, including reporting and data collection.
- **Providing technical guidance and leadership** in national decision and policy making as well as on international best practices, guidelines, and research, their application to national policies and programs, and scale-up of successful initiatives.

REGIONAL AND DISTRICT SUPPORT

In many countries, district and regional health authorities make decisions on service implementation, staff allocation, training, and service delivery standards; they also implement data collection and analysis. The Expanded MTCT-Plus project contributed by:

- **Supporting decentralization of HIV services** from large hospitals to smaller hospitals and health centers—carefully coordinating with regional health authorities on training, supportive supervision, and

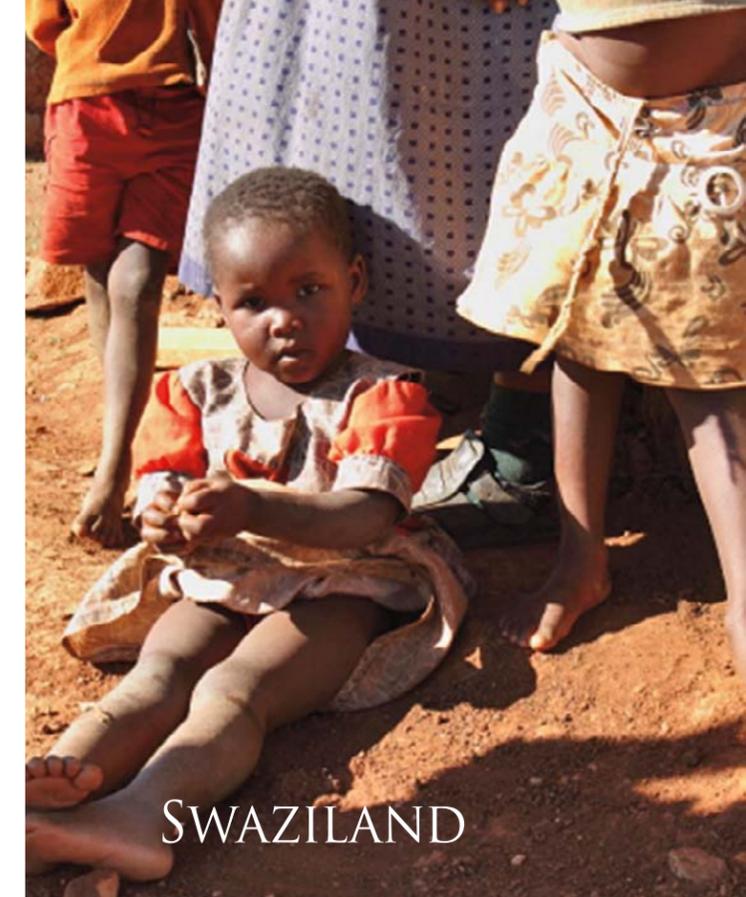
the development and execution of detailed decentralization plans to put services closer to home for PLHIV.

- **Enhancing human resources for health capacity**—that is, by promoting task shifting; providing clinical mentorship; developing and implementing curricula for training; and building capacity of district health management teams.

FACILITY SUPPORT

The health care facility, the primary point of service delivery, is a pivotal focus of ICAP support. Activities included:

- **Improving services' quality and comprehensiveness** via regular on-site mentoring of health care workers (HCWs) and multidisciplinary teams (MDTs); establishing participatory systems such as standards of care (SOC; see pages 6 and 10) to measure and improve quality; and supporting use of routinely collected program data to improve programs and make decisions.
- **Improving service delivery by building HCWs' capacity** via consistent on-site classroom and hands-on training, supportive supervision, and clinical mentorship and by empowering health care workers to take an active role in addressing challenges.



SWAZILAND

Children outside their home in Swaziland

DEVELOPING A COMPREHENSIVE HIV PACKAGE OF CARE IN SWAZILAND

During the early years of implementation, late treatment initiation was common, care options were limited for those not eligible for ART, and national guidelines focused on antiretroviral treatment, making limited recommendations as to ongoing care. As part of the national technical working group on care and treatment, ICAP provided substantial technical assistance to develop a new national Comprehensive HIV Package of Care (POC), which was completed in 2010. It provides integrated guidelines for a full continuum of HIV care for families, from testing and pre-ART care to ART, treatment of TB/HIV coinfection, and palliative care. The POC also outlines adherence and psychosocial support services and essentials of positive living.

Figure 2: ICAP's Approach

ICAP'S APPROACH to Strengthening HIV Treatment & Care Systems			
NATIONAL LEVEL	DISTRICT LEVEL	FACILITY LEVEL	COMMUNITY LEVEL
SUPPORT of	SYSTEMS for	IMPLEMENTATION of	MAINTENANCE of
Protocol & Guidelines Development & Dissemination Monitoring & Evaluation Systems Collaboration & Communication with Governments, MoH & Partners	Adequate Access to Services Human Resources Allocation & Training Ongoing M&E Administrative Reporting Management Structure & Training	PMTCT Service Delivery Family Support Strategy Early Diagnostic Services Implementation Based Training Multidisciplinary Team Building Counseling & HCW Support Data Collection & Reporting Infrastructure & Laboratory Improvements Procurement & Supplies	Links to HCWs & VHWs Links to Facility Adherence Support Communication Follow-up Treatment & Care



PHOTO BY DEIDRE SCHOO



Careful record keeping assists in quality of care.

THE IMPORTANCE OF INFORMATION IN QUALITY OF CARE

In Cameroon, ICAP monitoring and evaluation staff was placed at each facility. They staged in-service trainings for facility M&E staff and mentored them on the importance of monitoring of ledgers and registers regularly for completeness and correctness. As a result, the rate of missing data dropped by more than 50% in a single year. Additionally, implementing a system of data review and checking ensured capture and correction of data difficulties in real time.

■ A Multidisciplinary Approach

In ICAP programs, nurses, doctors, social workers, lay and professional counselors, pharmacists, lab technicians, data clerks, peer educators, and community health workers are trained to work as teams supporting comprehensive care and treatment services that are essential for those living with HIV.

- **Building the capacity of MDTs** by improving team communication, task shifting, mentoring for “better practices,” and developing systems for team meetings and for delivering services.
- **Enhancing support for whole families** by teaching and mentoring HCWs about family-focused care and about how to develop systems that will engage client family members in HIV testing, counseling, and care and treatment.
- **Improving appointment and patient tracking and tracing systems** to enhance patient flow, identify and follow up with clients who miss appointments, and track mom–baby pairs through the continuum of PMTCT care from first visit for antenatal care through delivery (when many clients are “lost”) until final determination of the infant’s HIV status.
- **Improving the quality of data collection and reporting** by strengthening related systems, institutionalizing patient tracking systems and monitoring and evaluation (M&E) tools, and improving data management and site-level reporting.
- **Optimizing the use of diagnostic tools** and ensuring adequate supplies of rapid test kits, dried blood spot (DBS) testing kits, and other supplies. ICAP worked to strengthen laboratory capacity to perform CD4 cell count testing, testing for early infant diagnosis, and other tests, ensuring that clients received their results quickly.
- **Building facility infrastructure**—that is, expediting facility repairs and renovations and working with site staff to make the most efficient use of current space.

- **Improving procurement and supply chains**, supporting facilities in forecasting and in timely procurement of needed medical equipment and supplies, including laboratory technology.

COMMUNITY SUPPORT

Because ICAP recognizes that the success of any facility-based service depends on community acceptance and family support for health-seeking behavior and long-term adherence, the Expanded MTCT-Plus program emphasized the important role of communities and families in preventing pediatric HIV infections and supporting families’ health and well-being. To provide the necessary strong, well-coordinated continuum of care at facility and community levels, the program had a number of strategies:

- **Mobilizing the community** (including community leaders and other key “gatekeepers”) on PMTCT and the importance of HIV testing and early care and treatment to prevent new HIV infections and provide lifesaving care and treatment to people living with HIV.
- **Supporting the continuum of care**, from homes to facilities and back to homes and communities. Along the continuum are community identification of pregnant women, HIV-exposed infants, and sick women and children, and immediate referrals to health facilities.
- **Building effective linkages** and formal, two-way referral systems between facilities and communities. To do this required planning, implementation, monitoring, and support of outreach programs and organizations, through existing community programs and organizations and through peer educators and community health workers. Referral forms and systems were developed to identify, refer, and follow clients in the community.

TOP A doctor (right) consults with a regional director in Kenya.

CENTER Outreach workers in Tanzania help to inform the community of available services.

BOTTOM Members of the peer support group in Rwanda share a story.



PHOTO BY CASEY KELBAUGH



PHOTO BY NATHAN GOLON



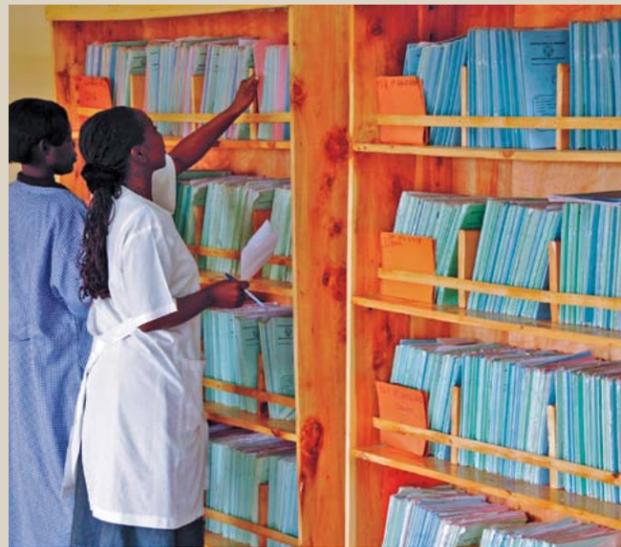
PHOTO BY LUCAS ROBINSON



Training, communication, and supportive supervision are key elements of ICAP's approach. Administrative systems are key to program success.

HOW THE EXPANDED MTCT-PLUS PROGRAM BUILT AND SUPPORTED FACILITIES' QUALITY AND CAPACITY

- **MTCT-Plus implementation workshops:** Performance improvement-based training during the early stage of ICAP site support reached more than 90% of facilities' HCWs. A systematic process identified desired and actual performance, analyzed gaps, and chose interventions to address them.
- **Continuing medical education sessions:** Competency-based and skills-oriented, these twice-weekly afternoon sessions at each site built on previous trainings.
- **Clinical Mentoring and Preceptorship:** Practical, on-the-job training, support, and consultation at ART, ANC, and maternity clinics took place daily.
- **Supportive supervision:** ICAP clinical advisors and site coordinators provided clinical mentorship and supportive supervision an average two to three days per week.



- **Training health care workers on adherence and psychosocial support:** Trained and mentored on issues relating to adherence and psychosocial support (APS), all MDT members and lay counselors were sensitized to APS' importance and acquired the knowledge and skills to provide APS services.

- **Linking communities and facilities:** District health management teams were supported to strengthen the village health worker (VHW) program. VHWs and VHW program managers were trained, supported, and mentored in how to build strong links between communities and health facilities to provide services such as tracing patients who had become lost to follow-up.

- **Job aids and data collection tools:** ICAP developed and distributed registers and job aids (e.g., appointment books, dosing charts, lab monitoring schedules, clinical staging and TB screening tools, and pocket handbooks—some now adapted for national use) and provided on-the-job mentoring on their use. They continue to prove useful performance enhancers and training supplements.

- **“Warmline” for clinical support:** ICAP's multidisciplinary team made itself continuously available, even when not on site, to discuss challenges and respond to clinical questions from staff at supported facilities.

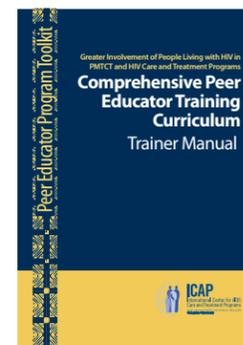
- **Applying the MIPA principle.** Meaningful Involvement of PLHIV (MIPA) engaged people living with HIV not only as recipients of PMTCT and HIV services but also as providers—thus reducing HIV stigma, sending a message of acceptance, and tapping into unique PLHIV perspectives and experiences to improve program quality and reach.
- **Developing systems for community tracking, tracing, and follow-up.** Linkages with existing community health workers as well as new systems were essential in following up on clients who miss appointments or stopped returning to the clinic for care or treatment.

ICAP-NEW YORK TECHNICAL LEADERSHIP TO PROGRAMS AND PARTNERS IN COUNTRY

Staff at ICAP-New York provided technical leadership and support to counterparts in supported programs at national, district, and facility levels, focusing on results-oriented program planning and management; on monitoring and evaluation systems and data for decision-making support; and on producing materials and tools to help expand and improve the quality of comprehensive MTCT-Plus services.

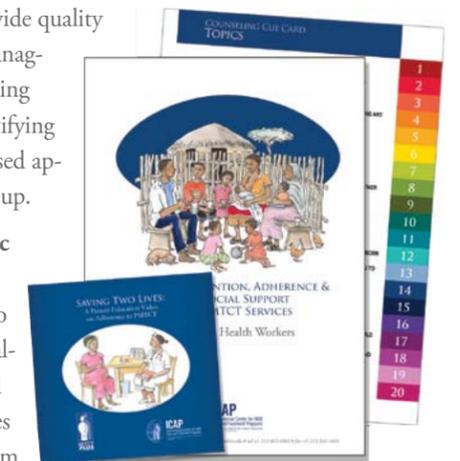
Building on country-specific tools and lessons learned, as well as on innovations in the field, ICAP supported the exchange of ideas and best practices by developing a number of generic tools and materials, which have been adapted in multiple country settings and, in many cases, by ministries of health. These include:

- **A generic peer educator training package,** with trainer manual, participant manual, and implementation manual.



A Cameroonian mother and child

- **A compilation of support materials** in the “Improving Retention, Adherence, and Psychosocial Support within PMTCT Services: A Toolkit for Health Workers” (see below). The toolkit contains PMTCT-specific counseling cue cards; generic forms and guides to support systems and services for PMTCT clients; an implementation workshop training curriculum; and a PMTCT patient education video on adherence to care and treatment.
- **Registers,** including registers for ANC, maternity, provider-initiated counseling and testing, HIV-exposed infants, and service referrals. These tools permitted adequate data capture for efficient, accurate monitoring and reporting.
- **Appointment books and appointment systems** to help clinic staff provide quality PMTCT services—managing patient flow, planning for each day, and identifying patients who have missed appointments for follow-up.
- **PMTCT and pediatric standards of care tools,** used routinely to assess the type and quality of services provided for feedback to facilities and MDTs to help them improve services' quality and reach.



ICAP's toolkit for health workers includes over 300 pages of forms, training modules, and a patient DVD.



■ *“We help ignite the flame for these teams to build their own [programs]. Participants also share their own ideas and experiences, and continue to support one another after they complete the program.”*

— Liezl Smit, MD,
S2S Program Clinical Director

Training also figured strongly in New York support to country programs. From 2006 to 2008, an ICAP partnership with University of Stellenbosch in South Africa created the South-to-South Partnership for Comprehensive Pediatric HIV Care and Treatment Program, which held 32 two-week training courses—training 115 HCWs from 11 countries in sub-Saharan Africa on comprehensive pediatric HIV services. (See page 24)

Additionally, ICAP sponsored three annual PMTCT and pediatric technical meetings (in 2007, 2009, and 2010), attended by ICAP staff and partners throughout sub-Saharan Africa. These meetings gave participants an opportunity to exchange lessons learned, receive technical updates and skills building in PMTCT and pediatric HIV care and treatment, and share innovations.



TOP A S2S workshop breakout group in South Africa

BOTTOM Dr. Helena Rabie, S2S Pediatric Technical Advisor, and a Rwandan team member consult during rounds at S2S-I.

RIGHT Staff use patient cards to find details on a patient's medication.

NEXT PAGE Street scene in Rwanda



PHOTO BY LUCAS ROBINSON

Each of the nine countries supported under the Expanding the MTCT-Plus Initiative cooperative agreement had a similar goal (see Figure 3, next page), yet each adopted different approaches to implementation based on national, regional, and local needs and priorities.

Country Snapshots: One Goal, Different Approaches

LESOTHO (October 2005–March 2010)⁵

In Lesotho, ICAP forged strong partnerships with various levels of the health care system—from the central MOH to district health management teams to health facilities and community-based organizations—to decentralize and improve the quality and reach of expanded MTCT-Plus services. Through these collaborations and extensive on-site mentoring, ICAP supported the delivery of the full range of comprehensive PMTCT services, including ART for eligible women, within 34 ANC clinics. “One-stop shopping” for pregnant women and their HIV-exposed children within the ANC resulted in increased uptake of PMTCT services—including testing, ART, and early infant diagnosis—and improved retention of mothers and babies in PMTCT care.

NIGERIA (October 2005–September 2008)

ICAP worked in partnership with national, state, and facility-based stakeholders to establish sustainable programs in Kaduna and Cross River states. A comprehensive approach that included practical training, clinical mentoring, systems strengthening, and infrastructure support improved access to and uptake of quality PMTCT and related services for more than 58,000 women, children, and family members.

5. Dates are those of active ICAP support under the Expanded MTCT-Plus project.

TOP *The Qoaling Filter Clinic in Maseru District, Lesotho*

BOTTOM *In the Kigoma region, Tanzania, a nurse administers antenatal care (ANC) to a woman who is expecting her tenth child.*

NEXT PAGE *The Rigasa area in Kaduna, Nigeria*



PHOTO BY NATHAN GOLDON

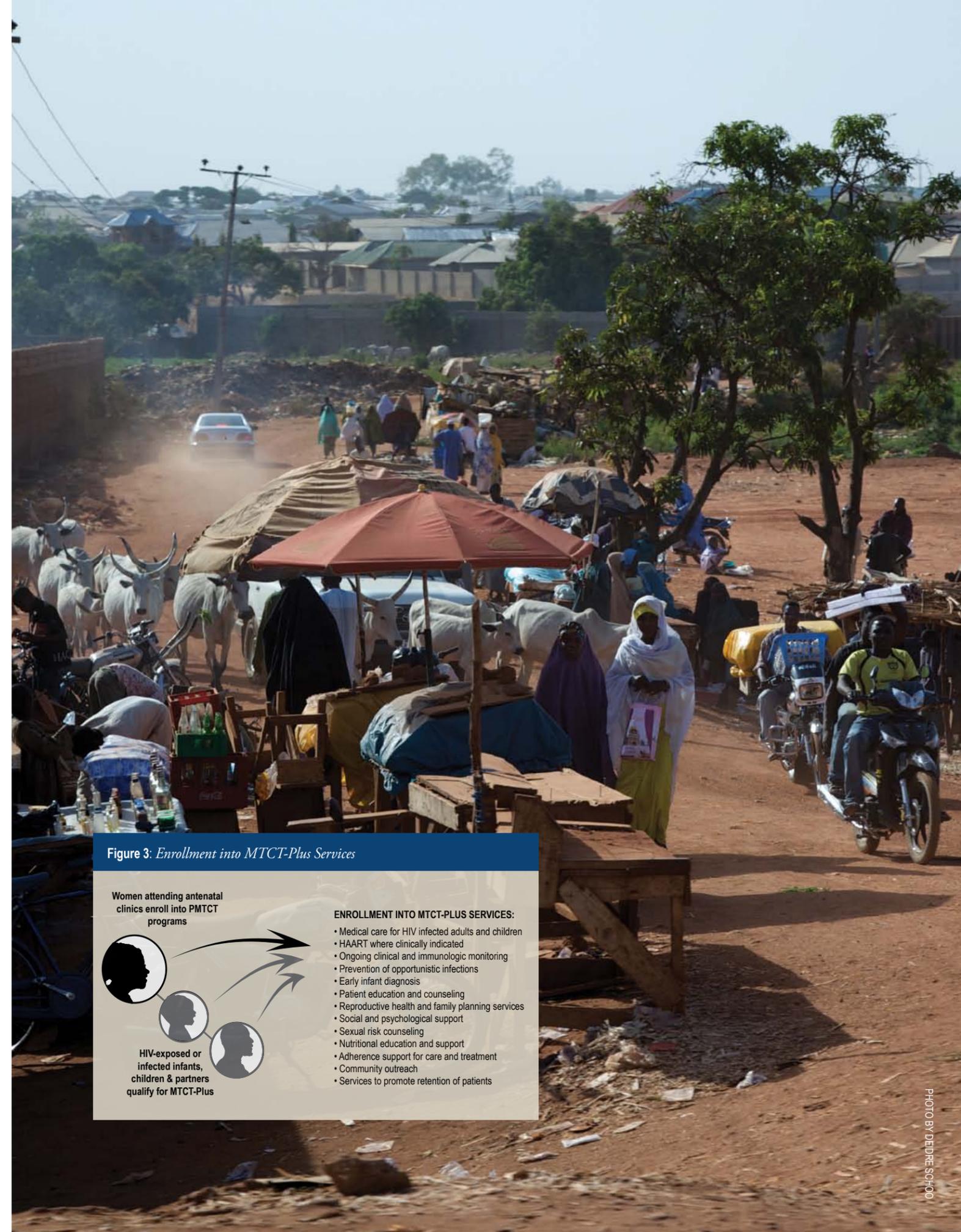


Figure 3: Enrollment into MTCT-Plus Services

Women attending antenatal clinics enroll into PMTCT programs



HIV-exposed or infected infants, children & partners qualify for MTCT-Plus

ENROLLMENT INTO MTCT-PLUS SERVICES:

- Medical care for HIV infected adults and children
- HAART where clinically indicated
- Ongoing clinical and immunologic monitoring
- Prevention of opportunistic infections
- Early infant diagnosis
- Patient education and counseling
- Reproductive health and family planning services
- Social and psychological support
- Sexual risk counseling
- Nutritional education and support
- Adherence support for care and treatment
- Community outreach
- Services to promote retention of patients



TOP A nurse in Swaziland sits in a kombi waiting to transport blood samples.

CENTER (L) Young man in Cameroon

CENTER (R) A series of batteries store power collected by newly installed solar panels at a clinic near Kigali, Rwanda.

BOTTOM A Cameroonian child living with HIV infection is treated at the pediatrics unit.



PHOTO BY LUCAS ROBINSON



RWANDA (July 2006–September 2009)

ICAP supported managers and HCWs from 18 facilities in Kigali and the western region of the country to transition from PMTCT to MTCT-Plus related services, which included multidrug PMTCT regimens, initiation of ART for eligible women during pregnancy, and an emphasis on providing care for entire families through outreach and testing. With ICAP support, the program developed systems ensuring that all pregnant women living with HIV received a CD4 test at the ANC, with results delivered within 10 days. Systems also improved identification of pregnant women eligible for ART; strengthened the referral network between PMTCT and HIV-exposed infant follow-up services; established mom–baby follow-up with home visits and service integration at facilities; integrated family planning into HIV services; and promoted partner and child testing and enrollment into care.

SOUTH AFRICA (May 2006–September 2010)

In 2006, with the establishment of a uniquely innovative cross-continent partnership with Tygerberg Children’s Hospital at the University of Stellenbosch in South Africa, ICAP launched the South-to-South Partnership for Comprehensive Pediatric HIV Care and Treatment Program, Phase 1 (S2S-I), mentioned briefly above. Recognizing the immense capacity of the Tygerberg Children’s Hospital to serve as a model across Africa, ICAP built its capacity to design, manage, and evaluate an international training and mentoring program. During S2S-I, 115 participants representing all key disciplines attended a two-week, skills-based training at Tygerberg Children’s Hospital, then returned to their

countries to disseminate knowledge and implement quality pediatric care and treatment services. S2S Phase 2 (S2S-II), launched in 2008, aimed to support South Africa’s Department of Health to strengthen systems to deliver quality, decentralized PMTCT and pediatric services. ICAP supported the S2S team to adapt S2S-I training methods and materials to the South African context, then assisted in the rollout of site training and mentoring with district- and facility-based managers and HCWs representing 36 health facilities in four districts.

SWAZILAND (January 2006–September 2010)

In Swaziland, where a staggering 42% of pregnant women are living with HIV,⁶ ICAP supported the MOH to decentralize HIV care and treatment services and focus on prevention, care, and treatment for the whole family. Increased uptake of and retention in PMTCT and HIV care and treatment services by mothers, children, and families resulted from intensive, site-based mentoring and innovative strategies. Achievements included a fast-track system to initiate pregnant women on ART; making improvements in record keeping and data collection and use; improving and structuring counseling and education sessions; and rolling out a national expert client program.

TANZANIA (October 2004–September 2006)

In Tanzania, ICAP provided technical support to 28 health facilities and two district hospitals in Rombo and Same districts in order to expand the delivery of quality PMTCT services using a district model approach. Establishing referral networks between health facilities and hospitals gave pregnant and postpartum women, their children, and their families’ greater access to comprehensive PMTCT services.

6. UNAIDS. 12th Round of the Swaziland HIV Sentinel Survey, 2008 [Power Point presentation]. Accessible at: ews.unaids.org/public/PRG/download.axd?p=39249.



TOP An antenatal examination in Tanzania

BOTTOM Two women waiting for care and treatment services at a clinic in Swaziland

ANGOLA (January–February 2008)

In Angola, ICAP responded to a USAID request to conduct a nationwide situational analysis on PMTCT. USAID-Angola used the results to develop a strategy for supporting the Government of Angola in scaling up the national PMTCT program.

CAMEROON (October 2006–September 2009)

ICAP’s public–private partnership with the Cameroon Baptist Convention Health Board extended and enhanced HIV prevention, care, and treatment services for women, children, and families. Through this partnership, and through cost share with the Foundation-

supported MTCT-Plus Initiative, PMTCT services were decentralized and client retention improved. Trained peer educators, themselves living with HIV, supported adherence.

KENYA (January 2004–February 2008)

ICAP partnered with Indiana University’s Academic Model Providing Access to Healthcare (AMPATH) on technical and systems support to the MOH at district level, providing clinical mentoring and training, improving systems to support PMTCT service delivery and data collection and use, and renovating laboratories and facilities.

Children wait outside a pharmacy.

PHOTO BY CASEY KELBAUGH



PHOTO BY DEIDRE SCHOO

■ *“When my wife was sick very early in 2008, she was discovered to be HIV-positive. I tested and was also positive, so we both joined the support group. Because of ICAP’s intervention, our lives have become more meaningful and we now have a 5 month old HIV-negative baby.”*

OVER THE COURSE of the project, ICAP participated in many task forces, systems development teams, and technical work groups. Whether the objective was setting national guidelines or mentoring a single nurse, the systems developed and relationships formed will last long after program support has ended. Below are illustrative examples of ICAP’s collaborative efforts and their achievements.

IMPACT OF THE MTCT-PLUS INITIATIVE BY APPROACH AND COUNTRY

Increasing Access and Improving Systems

In many countries, access to PMTCT and HIV care and treatment services is still limited. Expanding and decentralizing services ensures that clients and their family members have greater access to services, decongests services in hospitals, and builds the health system’s capacity to deliver comprehensive, family-focused care. ICAP’s support for decentralization of PMTCT and family-centered HIV services has included providing technical

assistance for the development of systems and processes for starting up and maintaining services; developing practical guidelines and clinical tools; strengthening management and supervision capacity at national and regional levels and in health facilities to monitor and strengthen services; providing clinical mentoring and staff training to ensure standardized, high-quality service delivery; and supporting the adaptation of reporting and monitoring systems at the primary care level.



TOP ICAP vehicle fording a river in Lesotho

BELOW Sisters at the Qoaling Filter Clinic, Lesotho

Lesotho:

DECENTRALIZING PMTCT AND HIV CARE AND TREATMENT SERVICES FOR PREGNANT WOMEN

In Lesotho⁷, ICAP supported the MOH to decentralize and extend access to PMTCT services and worked to improve supportive systems and the quality of PMTCT services for women, children, and families. From training and mentoring to build HCW capacity to developing and implementing PMTCT and ART guidelines to establishing and developing registers and appointment systems, ICAP utilized a range of techniques. Following a team-to-team approach, ICAP’s own multidisciplinary advisors engaged with site MDTs to provide comprehensive care to clients.

Also, as part of its efforts to decentralize services and improve access, ICAP supported the institutionalization of routine HIV testing, immediate CD4 testing, and clinical staging, as well as the introduction of adherence support in individual and group sessions in ANC. Because of these improvements and the ability to offer care and treatment services within ANC settings, ICAP-supported sites were able to increase ART access for eligible pregnant women. Both the number of pregnant women enrolling in care and the number of those initiating ART increased dramatically over the course of the project—from six HIV-infected pregnant women initiated on lifelong ART at ICAP-supported sites each quarter at the start of the project in 2006 to almost 119 patients during the last quarter of 2009.

7. See page 10.

■ *“The sisters I interviewed were knowledgeable about providing ARV for PMTCT and about the indications for enrolling women into full HAART. All HCWs knew the clinical criteria for staging HIV/AIDS; could advise on safe infant feeding practices and identify TB and sexually transmitted infections; and knew the importance of cotrimoxazole for children and adults. ANC registers appeared to be complete at all sites visited.”*

— External USAID Evaluation of ICAP Lesotho Performance 2006–2009



TOP A child living with HIV infection is treated at the pediatrics unit at the Barau Dikko Specialist Hospital in Nigeria.

BOTTOM A lab worker uses microscopes provided by ICAP at the Barau Dikko Specialist Hospital in Nigeria.

Nigeria:

INCREASING ACCESS TO HIV TESTING FOR PREGNANT WOMEN

At the start of ICAP’s work in Nigeria, rapid HIV testing of pregnant women was done by laboratory technicians in laboratories. Pregnant women visiting antenatal clinics were routinely sent to laboratories, in a different location, with a high loss to follow-up in the process. ICAP advocated with state officials and worked closely with health facilities to transition rapid HIV testing to trained nurses and midwives in ANC and maternity clinics. Then, rapid HIV testing and counseling were incorporated into all national PMTCT training curricula, and ICAP trained 255 clinicians in HIV counseling and testing. These changes permitted laboratory staff to work on other priorities and enabled nurses at primary health centers, which lack laboratory facilities, to conduct rapid HIV testing. Point-of-service testing is now available at 38 ICAP-supported ANC sites.

Additionally, ICAP-Nigeria worked with state officials to strengthen and improve uptake of HIV counseling and testing. As a result, all pregnant women now undergo group pretest counseling with an “opt-out” approach. In other words, they consent verbally to the testing (and have the opportunity to decline); are tested in the ANC right away; and receive results the same day. More women now test for HIV, receive their results, enroll in PMTCT services if necessary, and return for subsequent visits.

PHOTO BY DIEDRE SCHOO



PHOTO BY DIEDRE SCHOO



A clinician tests an infant for HIV in Swaziland.

SWAZILAND

MEASURABLY IMPROVING SERVICE DELIVERY

ICAP's efforts to improve service delivery to women, children, and families expanded from 15 public sector health facilities in 2006 to 41 public and mission sector health facilities by mid-2010. ICAP's direct support included clinical mentoring and skills-improvement; management through multidisciplinary teams; enhanced resources for adherence and psychosocial counseling; data use to improve services; and facility refurbishments and material support. The number of HIV-infected individuals receiving clinical care in ICAP-supported sites increased from less than 10,000 during fiscal year 2007 to more than 42,000 in FY2009, exceeding program targets each year.

Systemic Improvements Achieved with Lead Support from ICAP

- Design and initiation of a strategy and process to decentralize HIV care and treatment services.
- Development and adoption of a standardized, comprehensive HIV Package of Care.
- Integration of early infant diagnosis and follow-up of exposed infants within under-five care clinics.
- Establishment of a national expert client program to strengthen adherence counseling.
- Development of a national community linkages program to strengthen the links between primary care clinics and their communities.

Increasing Uptake and Improving Retention

Enrolling pregnant women and children into HIV services early and ensuring their adherence to PMTCT and HIV care services can prevent new HIV infections and reduce morbidity and mortality, effectively sustaining the quality of life for mothers, their infants and children, and their partners. Systems and services supporting clients' retention and adherence were a cornerstone of work under the Expanding the MTCT-Plus Initiative cooperative agreement.

Swaziland:

EXPERT CLIENTS IMPROVE ADHERENCE

To address one of the greatest challenges to PMTCT and HIV care and treatment in Swaziland—high loss to follow-up—ICAP built the power of MIPA, supporting the MOH in planning and rolling out a national program of expert clients, individuals living openly with HIV and receiving PMTCT and/or HIV care services. Working with the MOH and site MDTs, ICAP helped select nearly 100 expert clients for more than 50 sites and trained them in an ICAP-developed curriculum that emphasizes family-focused care and adherence to PMTCT and HIV care and treatment. Ongoing mentorship was provided, along with job aids developed to support adherence preparation, ongoing adherence assessment and support, and psychosocial support. Expert clients, who sign MOH contracts, counsel clients about their diagnosis, positive living, and the importance of adherence, working as part of the MDT and lending firsthand experience. A year into the program,



■ *“The difference being created by these individuals [expert clients] is apparent in the testimonials of the people whose lives they have affected.”*

— Dr. Velephi Okello, National Coordinator, Swaziland National AIDS Programme

a review⁸ found that expert clients had contributed to the provision of both pre-ART and ongoing adherence counseling, especially among pregnant women, and had improved uptake of and retention in key PMTCT services as well as intrafacility referrals and facility–community linkages.

ABOVE An expert client in Swaziland is being congratulated for completing her training.

Tanzania:

DECENTRALIZATION INCREASES UPTAKE OF SERVICES

In Tanzania, although most of the population lives in rural areas, PMTCT services were more widely available in urban areas. ICAP worked with the MOH, specifically in Rombo and Same districts, to decentralize PMTCT services, partnering with the districts to design systems that used existing maternal–child health services as a platform for delivering PMTCT services and a gateway to family-focused HIV services. A referral relationship was set up between district hospitals and their peripheral health facilities to extend the reach of care and treatment services district-wide. Thus, women continued to receive services from known HCWs at familiar health facilities. As a result of decentralization, PMTCT service uptake increased dramatically and, with ICAP support, more than 1,000 women, men, and children were enrolled in HIV care and treatment.

8. The review was undertaken by the MOH, ICAP, and the Swaziland National Network of People Living with AIDS, with funding from the Clinton Foundation.

BELOW & OPPOSITE, BOTTOM Women have their children weighed at a health center in Tanzania.



PHOTO BY NATHAN COLON



A laboratory technologist processes a specimen in a serology lab in Nigeria.

Improving the Quality of Care

Despite dramatic achievements in the expansion of PMTCT services in sub-Saharan Africa, challenges remain, and inadequate service quality and comprehensiveness create missed opportunities for women to receive PMTCT and family-focused care. For example, in South Africa, although PMTCT coverage reached 57 percent of the 220,000 pregnant women living with HIV in 2007—an increase from 15 percent in 2004⁹—only 12 percent of HIV-infected pregnant women were assessed for ART eligibility in the country.¹⁰ Under the Expanding the MTCT-Plus Initiative cooperative agreement, ICAP support prioritized a quality, comprehensive approach to initiate, expand, deepen, and link family-centered services and to rapidly increase uptake of HIV prevention, care, and treatment services for women, children, and families.

Rwanda:

DEVELOPING AND IMPLEMENTING PMTCT STANDARDS OF CARE FOR QUALITY IMPROVEMENT

In Rwanda, ICAP successfully introduced an innovative continuous quality improvement approach at PMTCT sites. Using a simple tool, sites conduct a self-assessment to examine performance on key indicators, or standards of care (SOCs). When performance issues are identified, staff works together to identify solutions and develop a

9. UNAIDS. *Children and AIDS. Third Stocktaking Report*. New York, NY: United Nations Children's Fund; 2008. Accessible at: http://www.unicef.org/publications/files/CATSR_EN_11202008.pdf.

10. World Health Organization. *Towards Universal Access. Scaling Up Priority HIV/AIDS Interventions in the Health Sector Progress Report 2008*. Geneva, Switzerland: World Health Organization; 2008. Accessible at: http://www.who.int/hiv/pub/towards_universal_access_report_2008.pdf.

plan of action. Between February and May 2007, ICAP introduced the SOC assessment at 14 PMTCT sites. Following the assessments, sites were successful in taking action to improve services—for example, by aligning ANC clinic days and CD4 testing schedules so that pregnant women could be tested while at a clinic for antenatal care.

From July 2006 through September 2007, ICAP successfully transitioned all 18 sites to the MTCT-Plus model of care, in line with the national PMTCT protocols. This involved ensuring that all HIV-infected pregnant women receive CD4 testing as well as strengthening the referral network between PMTCT and exposed infant follow-up, and developing systems to improve patient flow within a clinic. Additionally, partner testing was promoted; testing in maternity for women of unknown HIV status was improved; follow-up of mother–infant pairs strengthened (by establishing a system for home visits); family planning integrated with HIV services; and active referral to care and treatment promoted for pregnant women eligible to initiate life-long ART. The enormous success of this early program demonstrated the importance of the family-focused approach and directly informed the successful scale-up of PMTCT services in subsequent years in Rwanda.

South Africa:

BUILDING SKILLS IN MULTIDISCIPLINARY TEAMS TO IMPROVE CARE

Several factors challenge the scale-up and quality of PMTCT and pediatric HIV care and treatment services at health facilities across sub-Saharan Africa, including limited human resources, the perceived complexity of treating pregnant women and children, inadequate pediatric and PMTCT clinical skills, and gaps in referral systems and linkages among services. S2S-I, noted above (see page 11), trained MDTs across sub-Saharan Africa in clinical skills and supportive supervision. [note sidebar next page] During Phase 2, as noted, ICAP worked synergistically with other USAID-South Africa implementing partners and provided comprehensive technical, programmatic, capacity building, and systems

support to improve the quality and reach of family-centered PMTCT and HIV services at 36 health facilities in four districts of South Africa.

Over the course of these two programs, ICAP and its partners devised and expanded practical and participatory training materials, mentoring programs, and tools to enhance the quality of family-centered HIV services on topics such as HIV virology; infant diagnosis; care of the exposed infant; pediatric HIV; PMTCT; growth and neurodevelopmental monitoring; ART; child feeding and nutrition; pediatric tuberculosis; opportunistic infections; treatment adherence; psychosocial support and counseling; and monitoring and record keeping. The partnership then extended circulation of these tools and modules to additional stakeholders in surrounding regions, and the tools and methods are now being used in Kenya, Ethiopia, and Mozambique as well as in South Africa. In Rwanda, a national training program at the Center of Excellence was modeled on the S2S program, with materials and training methodologies adapted to train more than 100 Rwandan HCWs on pediatric HIV care and treatment.



SOUTH AFRICA

PEDIATRIC AND FAMILY-CENTERED HIV TRAINING THAT WORKS

“Participant responses [to S2S-I workshops] indicated that S2S was essential in developing and refining their skills in providing quality HIV care and treatment....Participants reported high levels of confidence in delivering pediatric HIV services after the training and immediately applied the skills acquired at S2S. Since S2S training, participants said they placed more emphasis on identifying HIV-exposed infants and -infected children.”

— Final Report

South to South (S2S) Partnership for Comprehensive Family HIV Care and Treatment Program 2006 to 2010

ABOVE A S2S training session at Stellenbosch University, Cape Town, South Africa

LEFT Cameroonian mother and child





ABOVE *CME training (a weekly Continuing Medical Education training for hospital staff) is an ICAP-supported initiative at the Barau Dikko Specialist Hospital in Nigeria.* RIGHT *OVC training for community-based organizations*

PHOTO BY DEIDRE SCHOO

Swaziland: MENTORING MULTIDISCIPLINARY TEAMS FOR IMPROVED QUALITY OF CARE

ICAP nurtured the development of site-level MDTs that included staff from key health facility units (e.g., ART clinic, ANC clinic, TB clinic, etc). The teams met regularly, with ICAP support, to review progress and develop strategies to address challenges; meetings that included all facility staff reviewed data and discuss progress and obstacles. A high level of assistance from ICAP's multidisciplinary advisory team supported rapid capacity building of nurses and other clinic staff to provide ART services at primary care level and to develop the skills needed for decentralization and service quality improvement. From October 2009 to June 2010, ICAP made approximately 53 visits per month to 47 facilities in Swaziland. During these visits, ICAP worked directly with the site MDT, providing guidance and support to continue to improve the quality of client care.



PHOTO BY DEIDRE SCHOO

Extending Services to the Entire Family

Clinical and social norms may inhibit the expansion of care and treatment from the individual client to the entire family. However, HIV is a family disease, transmitted between partners and between mother and child, and it often affects several generations. Focusing solely on the individual misses opportunities to identify and engage other family members who may be living

TOP *A mother (right) holds her baby while she has blood drawn.*

BOTTOM *A doctor weighs a young boy.*



PHOTO BY CASEY KELBAUGH



PHOTO BY CASEY KELBAUGH

with HIV infection. For example, children born before the mother's diagnosis may not be tested because they appear symptom free. Similarly, opportunities may be missed to engage women's sexual partners in HIV-related services if HCWs do not routinely ask about clients' sexual partners—whether they have been tested, whether they are enrolled in care, whether the client has disclosed, etc.

Building knowledge, skills, and systems to support family-focused HIV care—using PMTCT clients as an entry point to the entire family—was a hallmark of the Expanded MTCT-Plus model of care.

Rwanda: PMTCT AS AN ENTRY POINT TO FAMILY TESTING AND CARE

In 2006, ICAP in close partnership with the Rwanda MOH, successfully established quality MTCT-Plus programs in the Western Region of Rwanda (Kibuye and Gisenyi) and in Kigali city. During this period, PMTCT services were established at 18 sites. In just 15 months, approaches to streamline integration between PMTCT and care and treatment programs were implemented in all supported sites. Consistent with the family-focused approach, pregnant women testing positive for HIV were systematically enrolled into comprehensive HIV care and treatment, along with their HIV-exposed children and HIV-infected partners. ICAP also provided technical support and mentoring to capacitate MDTs at each site to provide an integrated package of services to patients, including services for APS, integrated family planning, follow-up of mother–infant pairs through systematic home visits, and PMTCT and HIV care and treatment. The successes of this program have been widely shared within Rwanda and at international meetings, and many tools and approaches developed under this award have been adapted by the Rwandan Ministry of Health, contributing to improvements in the quality of family-focused PMTCT services nationwide.



LEFT An outreach worker in Tanzania discusses clinic services.

BELOW A group of lay counselors discuss effective ways of counseling HIV-infected patients.

Strengthening Community Linkages and the Continuum of Care

Linked, integrated, and mutually complementary community and facility services are critical to improving the health of women, children, and families. For a comprehensive PMTCT program to have lasting effect, the community it serves must accept, value, and support it. Work under the Expanding the MTCT-Plus Initiative cooperative agreement emphasized the important role that communities and families play in preventing pediatric HIV infections and supporting the health and well-being of mothers and families. With assistance from USAID and other partners, ICAP developed and implemented several effective methods of engaging the community and strengthening community–facility linkages so essential in the continuum of quality care.

Lesotho:

ENGAGING VILLAGE HEALTH WORKERS TO SUPPORT FAMILY-FOCUSED CARE

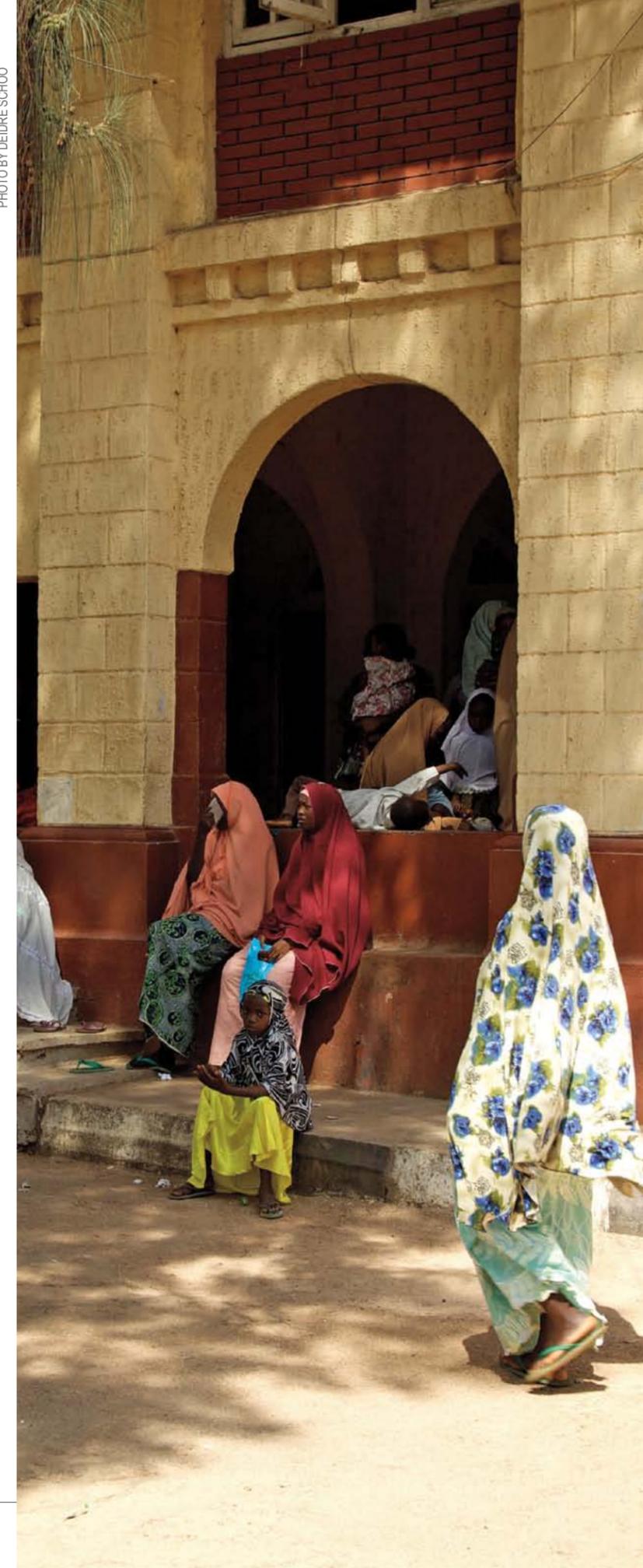
In Lesotho, ICAP worked with the MOH to enhance the national program of village health workers to ensure regular, high-quality support for PMTCT clients in their homes and in the community. ICAP replicated many of its on-site implementation support activities to improve the integration of family-centered HIV services in the community. Standardized training was provided; VHWs were supported and mentored to support integration and facility–community service linkages; and standardized two-way referral systems and forms were developed for VHWs to use when referring community residents to the facility and for HCWs to use when referring clients to a local VHW. Technical assistance was provided to facilities, district health management teams, and community-based organizations to better coordinate and link outreach activities conducted by community counselors, expert clients, VHWs, and other community-based health workers and to better link their activities to facility services. HCWs were mentored and systems created to strengthen linkages with VHWs.



■ *“Before village health worker trainings, women were not coming to collect the DNA PCR results. With the help of the village health workers, most of them started coming back.”*
— Mè ‘Mabatho Thatho, Senior nursing officer, Mohale’s Hoek Hospital, Lesotho

Outside the Barau Dikko Specialist Hospital in Nigeria

PHOTO BY DEIDRE SCHOO



VHWs received training and mentoring as well, and plans are in place to distribute kits containing essential supplies and tools to support them in their work (e.g., bag, umbrella, uniform, job aids, etc). With improved systems, knowledge, and skills, VHWs are now linked to community health facilities and meet there regularly. One of the biggest successes of the VHW program has been the improvements in tracking and tracing of mothers and babies who miss clinic appointments or do not return for results of EID testing. VHWs have successfully tracked clients, provided them with basic information and counseling, and facilitated their timely return to care.

Nigeria:

MOBILIZING TRADITIONAL BIRTH ATTENDANTS TO SUPPORT PMTCT SERVICES

In remote and hard-to-reach areas of Nigeria, ICAP has worked to enhance formal linkages between services available in the community and health facilities. For example, outreach activities were strengthened to promote HIV testing and early antenatal care among pregnant women—largely through building skills in and engaging HCWs, traditional birth attendants, and peer educators. When a pregnant or postpartum woman was known to be HIV infected, nurses or peer educators personally escorted her to the nearest PMTCT or comprehensive HIV care site to ensure that she, and her children, received needed care and medicines and understood why these were critical. To further strengthen community PMTCT services, traditional birth attendants were mobilized in Kaduna and Cross River states. The objective was to strengthen referrals and linkages and develop a network with health facilities to improve access to care for HIV-infected pregnant women and their HIV-exposed infants. In the absence of a national training curriculum for traditional birth attendants, ICAP developed one.



OVER THE COURSE of the USAID-funded Expanded MTCT-Plus Initiative cooperative agreement, a number of innovations and successes have been documented and a number of challenges encountered. The common themes and lessons that have emerged can inform the ongoing global scale-up of health services for families living with HIV.

LESSONS LEARNED DURING THE EXPANSION OF THE MTCT-PLUS INITIATIVE

To successfully eliminate MTCT, pregnant women and their infants require a comprehensive well-integrated continuum of care. The MTCT-Plus model recognizes the critical importance of addressing the health needs of women, emphasizing the importance of providing ART for those who are pregnant, with advanced HIV disease, as the key to preserving maternal health, preventing infant infection, and keeping families healthy. Ensuring that women are engaged and retained in their own care and that PMTCT services for the child extend beyond delivery for the duration of breastfeeding yields better health outcomes for both mother and child.

Recognizing HIV as a disease that affects families can result in better health for individuals, families, and communities. Women—who are disproportionately affected by HIV—are the cornerstone of families. Keeping mothers healthy enhances the health of their children and families. Furthermore, using PMTCT services as an entry point to engage partners, children, and other family members in HIV care is a valuable approach to scale-up HIV services and strengthen families and households.

Decentralization of HIV services is critical to meet the global need for HIV care, prevent new infections, and reduce the global impact of this devastating epidemic. Making care and treatment more accessible to women and families by extending services both to the lowest levels of health facilities and in communities will increase the uptake of and retention in PMTCT and HIV care and treatment services. Health providers

and facilities are anxious to provide these vital services to their family members, neighbors, and friends in their communities.

Strategic partnerships at multiple levels extend the reach, expand the uptake, and ensure sustainability of PMTCT and HIV care programs. Whether at national, district/regional, health facility, or community level, building equitable relationships with key partners makes for a smoother execution and more positive, more sustained outcomes. Supporting and collaborating with teams—for example, with ministries of health, district health management teams, MDTs, community organizations, and other implementing partners—yields more sustainable, more practical solutions. Furthermore, enlisting the community helps build understanding and support and alleviates disclosure issues, stigma, fear, and other factors constraining uptake of and engagement in health services.

Strengthen systems to improve health services. The strengthening of health systems at all levels is vital to improving not only PMTCT and HIV services but also all other health services provided to women, children, and families. Innovative approaches to rehabilitating infrastructure, integrating service delivery, enhancing HCW capacity, and improving communication systems have resulted in lasting improvements in individual and community health outcomes. A standardized approach to promoting evidence and data-based decision making is critical to continuous, sustained program improvement.

IN JULY 2002, in an address to the 13th International AIDS Conference in Durban, South Africa, Dr. Allan Rosenfield, then dean of the Mailman School of Public Health at Columbia University asked, “Where is the M in MTCT?” His provocative question paved the way for the MTCT-Plus Initiative.

THE WAY FORWARD

Under Dr. Rosenfield’s guidance, the initiative demonstrated that HIV prevention and HIV treatment could be successfully integrated using the PMTCT platform as an entry point. It also demonstrated that women, children, and families living with HIV in low-resource, high-HIV-prevalence settings could successfully engage in HIV care and antiretroviral treatment and could enjoy the same health benefits seen in well-resourced countries.

This early work paved the way for the global expansion of HIV treatment. With support provided by USAID under the Expanding the MTCT-Plus Initiative cooperative agreement, ICAP worked with local and national governments to successfully scale up its innovative model of care to reach hundreds of thousands of women, children, and families living with and affected by HIV. The MTCT-Plus commitment to recognize and meet the needs of pregnant women and children is unparalleled. The influence of this program will continue in the years ahead, and the lessons learned will inform future programs in resource-limited settings.

With the recent publication of new WHO guidelines for PMTCT, there is renewed emphasis on engaging pregnant women and their infants in long-term HIV care, both to preserve the health of the mother through HIV care and treatment and to prevent infection in the baby by providing antiretroviral prophylaxis from pregnancy for the duration of breastfeeding. In essence, successful PMTCT efforts require a transformation of the traditional approach to perinatal prevention to include the full spectrum of HIV care, including ART for

eligible women, care of the baby postpartum, and attention to the complex adherence and psychosocial needs of the family. The emerging recognition of the critical role of fathers and partners as well as the community in the success of both PMTCT and HIV treatment services further underscores the value of the innovative and comprehensive approaches that are central to the MTCT-Plus model of care.

As the global scale-up of HIV services continues, there remain important questions and challenges as to how resource constraints, human capacity, national agendas, and community preferences influence the feasibility of expansion and linkages among services. With countless lives at stake, addressing these questions and developing practical and replicable models for PMTCT programs as a gateway to HIV care and treatment services may represent one of the most significant interventions to improve the lives of HIV-infected individuals around the globe. The MTCT-Plus Initiative serves as one such model.

As stated at the beginning of this report, the Expanding the MTCT-Plus Initiative project had three goals: to prevent pediatric HIV infections; to support implementation of integrated and comprehensive family-centered HIV care and treatment services and reduce HIV-related morbidity and mortality among women, men, and children; and to enhance and strengthen the capacity of the public health system to provide quality, family-centered HIV care and treatment services. During work under this cooperative agreement, ICAP—thanks to the support and assistance of USAID and through partnerships with governments and health workers—has made measurable steps toward these goals, improving the health and well-being of countless women, children, and families in the process. ■

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PHOTO BY NATHAN GOLON



COVER IMAGES

CAMEROONIAN FATHER AND BABY: *Courtesy of the Cameroon Baptist Convention*

RWANDAN BABY IN SLING: *by Lucas Robinson*

TANZANIAN COUPLE: *by Nathan Golon*

NIGERIAN WOMAN SMILING: *by Diedre Schoo*

REPORT DESIGN *by Erin Dowling Design*



ICAP

International Center for AIDS
Care and Treatment Programs

MAILMAN SCHOOL OF PUBLIC HEALTH
Columbia University