RWANDA FINAL REPORT

January 1998–December 2006

USAID'S IMPLEMENTING AIDS PREVENTION AND CARE (IMPACT) PROJECT

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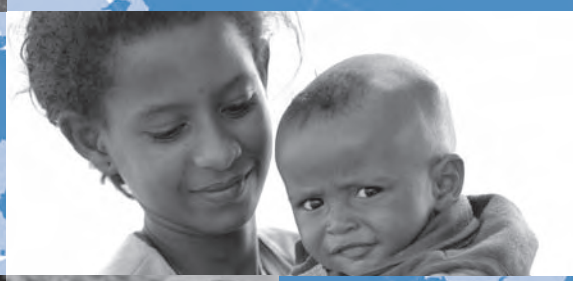
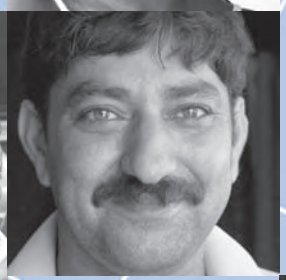
Impact Implementing AIDS Prevention and Care Project











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Making an Impact on HIV/AIDS in Rwanda

Rwanda Final Report
January 1998–December 2006

for

USAID's Implementing AIDS Prevention and Care (IMPACT) Project

Impact Implementing AIDS Prevention and Care Project

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Rwanda Final Report

Submitted to USAID
By Family Health International

December 2007

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We are also grateful to the numerous IMPACT partners who have helped us respond to the HIV/AIDS epidemic in Rwanda. In particular, we thank the members of the Commission Nationale de Lutte Contre le SIDA (CNLS), the Treatment and Research AIDS Center (TRAC), and the Ministry of Health (MOH).

We thank the many stakeholders from Rwanda's public and private sectors, the University of Rwanda, nongovernmental organizations, and faith-based organizations, whose contributions and hard work are helping meet the need for prevention, testing, treatment, and support for those infected and affected by HIV. Without their high level of commitment and collaboration, we would not have achieved what we did.

Over eight years, IMPACT/Rwanda was managed by a team of very dedicated staff based in Kigali, Kibuye, Muhanga, Nyamagabe, and Arlington who showed complete commitment to their responsibilities. To them we say, thank you and well done! The invaluable contribution of the international and local consultants who provided technical assistance to the program also cannot be overemphasized. Accomplishments and the successes achieved through the IMPACT Project have laid a strong foundation for future HIV programs in Rwanda and throughout Africa.

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LIST OF ACRONYMS

ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
BCC	Behavior change communication
BSS	Behavioral surveillance survey
CAMERWA	Centrale d'achat des médicaments essentiels consommables et équipements médicaux du Rwanda
CDC	Centers for Disease Control and Prevention
CNLS	Commission Nationale de Lutte Contre le SIDA
DH	District hospital
DHS	Demographic and Health Survey
FHI	Family Health International
FRSP	Fédération Rwandaise pour le Secteur Privé
FSW	Female sex workers
GOR	Government of Rwanda
HBC	Home-based care
HC	Health center
HIV/AIDS	Human immunodeficiency virus/ acquired immune deficiency syndrome
IEC	Information, education, and communication
IMPACT	Implementing AIDS Prevention and Care Project
MAGERWA	Magasins Généraux du Rwanda
MOH	Ministry of Health
NGO	Nongovernmental organization
NVP	Nevirapine
OI	Opportunistic infection
OVC	Orphans and other vulnerable children
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary health center
PLHA	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission
PNILT	National Integrated Program for Leprosy and Tuberculosis
PT	Preventive therapy
REDSO	Regional Economic Development Services Office (USAID)
ROADS	Regional Outreach Addressing AIDS through Development Strategies
RPR	Rapid plasma reagin
STI	Sexually transmitted infections
TB	Tuberculosis
TRAC	Treatment and Research AIDS Center
USAID	US Agency for International Development
USG	US Government
VCT	Voluntary counseling and testing
WHO	World Health Organization
WVR	World Vision-Rwanda

I. EXECUTIVE SUMMARY

From January 1998 to December 2006, the Implementing AIDS Prevention and Care (IMPACT) Project managed by Family Health International (FHI), provided support for technical and programmatic assistance to regional health authorities. Over time, IMPACT/Rwanda supported the development of a comprehensive response to the HIV/AIDS epidemic in the country. IMPACT-supported partners implemented programs in voluntary counseling and testing (VCT), behavior change communication for youth and other groups at risk of HIV infection, prevention of mother-to-child transmission of HIV (PMTCT), management of sexually transmitted infections, preventive therapy for opportunistic infections (OIs), community- and home-based care for persons living with HIV/AIDS, and antiretroviral therapy (ART) for HIV-infected patients.

The project's accomplishments fall into three primary areas:

1. ***Building local technical and program management capacity.***
   IMPACT/Rwanda invested considerable time and resources in building the technical and program management capacity of local partners and important government stakeholders. Through collaboration with key ministries, IMPACT/Rwanda and partner technical specialists reinforced the capacity of the national government in the areas of protocol development, VCT, PMTCT, ART, preventive therapy, surveillance, comprehensive prevention and care, and financial management.

2. ***Rapidly expanding facility-based prevention and treatment services.***
   IMPACT/Rwanda played an important role in introducing clinical care for HIV in Rwanda. The project managed a rapid scale-up of HIV clinical care services in the country, helping to make them available to those most in need. Starting with four VCT sites in 2000, by close-out in May 2006 IMPACT/Rwanda had expanded to 42 VCT sites, 35 PMTCT sites,18 ART sites, and 40 preventive therapy/OI sites.

3. ***Providing quality HIV services to Rwandans in need.***
   During the life of the project, IMPACT supported the delivery of essential HIV prevention, care, and treatment services to thousands of Rwandans.

II. PROGRAM STRATEGIES, IMPLEMENTATION, AND RESULTS

USAID began supporting IMPACT in Rwanda in January 1998. In 1998 and 1999, IMPACT/Rwanda's assistance focused on building public sector capacity in syndromic case management of sexually transmitted infections (STIs) and on information, education, and communication (IEC) programs in five provinces—Gitarama, Kigali Ville, Kigali Rural, Kibungo, and Byumba.

Starting in 2000, the IMPACT portfolio expanded to include support for behavioral surveillance and decentralized VCT services linked to medical and community care programs. The US Centers for Disease Control and Prevention (CDC), through USAID, provided funds to expand programming and support HIV sentinel surveillance and laboratory upgrades.

In 2002, USAID provided designated core funds to support a pilot program providing comprehensive care, including ART for people living with HIV/AIDS (PLHA). In 2003, funding from the President's Prevention of Mother to Child Transmission Initiative supported the scale-up of PMTCT services, adding ART and home-based care at select sites. Beginning in 2004, USAID obligated additional funding from the President's Emergency Plan for AIDS Relief (PEPFAR) to support the expansion of existing clinical and community-based programs.

In May 2006, IMPACT/Rwanda transferred support for all clinical, community-based care, and prevention programs to organizations implementing follow-on agreements; in December 2006, it did the same for youth prevention programs.

Country context

Rwanda reported its first AIDS case in 1983. While the country has experienced lower HIV prevalence than its neighbors, the epidemic continues to severely strain the country's health system and economy. UNAIDS estimated that 5.1 percent of adults in Rwanda were living with HIV in 2003. Limited surveillance data indicate that the epidemic has stabilized, but it continues to affect urban populations more than rural ones and women more than men, with young women and older men having the highest rates of infection.

HIV in Rwanda is spread primarily through heterosexual contact (75 percent) and mother-to-child transmission (20 percent). Those most vulnerable include sex workers and their clients, uniformed service personnel, orphans, prisoners, commercial truck drivers, transportation workers, and discordant couples.

The genocide had a significant influence on HIV infection due to widespread rape, crowded and violent refugee camps, and the subsequent economic impact, which contributed to widows lacking sufficient economic means and a large number of child-headed households and street children.

Approximately 22,000 people died from AIDS in 2003, contributing to Rwanda's average life expectancy of only 44 years. Because most Rwandans are subsistence farmers, the illness of a breadwinner is often devastating to entire families. By the end of 2003, an estimated 160,000 children had been orphaned by AIDS, compounding the social upheaval resulting from the genocide. Only 28 percent of households with an HIV/AIDS patient are able to pay for even basic care, leading families to borrow money, sell assets, or forego needed treatment.

Rwandan communities have developed their own coping strategies, including a rich network of local nongovernmental organizations (NGOs) serving local communities, including associations of persons living with HIV/AIDS (PLHA), cooperatives, faith-based organizations (FBOs), youth and sports associations, and women's groups. With their understanding of the local community, these NGOs have a strong commitment to mitigating the impact of the epidemic. Of particular note is the emergence of dynamic women's groups and associations, particularly those that advocate for orphans and other vulnerable children and HIV/AIDS services.

In addition, national-level organizations and associations are active, often joining NGOs to address common issues, exchange information, coordinate activities, and raise awareness of concerns within both the Government of Rwanda (GOR) and the international donor community.

Religious institutions have major reach in the Rwandan population through a system of tiered FBOs. The Catholic Church as well as Protestant and Muslim institutions have been active in their respective communities, and 40 percent of primary and secondary health facilities are operated by NGOs, including FBOs and religious missions.

In 2005, the GOR instituted broad reforms in the health service delivery system and local governance, working to achieve steady progress in decentralizing personnel and functions

to subnational levels. The GOR has provided proactive leadership in response to the epidemic, and has developed a national HIV/AIDS strategic framework and monitoring and evaluation plan, negotiated reduced prices for anti-retroviral drugs (ARVs), integrated HIV/AIDS as a development priority within its Poverty Reduction Strategic Plan, and reorganized national management of the program.

In 2006, two institutions provided overall leadership of Rwanda's anti-AIDS efforts. One was the National AIDS Control Commission (Commission Nationale de Lutte Contre le SIDA, or CNLS), which operates under the auspices of the President's Office, and the second was the Treatment and Research AIDS Center (TRAC), which is responsible for developing clinical guidelines for the treatment of HIV/AIDS and related diseases, certification of doctors providing ART, and training of personnel in VCT and PMTCT centers and the supervising district health teams.

Start up

In January 1998, USAID/Rwanda provided funding to IMPACT to expand activities launched under the AIDS Control and Prevention Project (AIDSCAP), which had supported activities in Rwanda from October 1993 to April 1997 and was also managed by FHI. Program activities in this first phase of IMPACT support were limited to strengthening the capacity of HIV/AIDS program managers in four regions in three primary areas: program planning and management, behavior change communication (BCC), and STI prevention and treatment.

In addition to supporting regional government efforts, IMPACT/Rwanda funded limited demonstration projects by NGOs in the same regions. At the request of USAID/Rwanda, a FHI program management specialist traveled to Rwanda to provide technical assistance to in-country IMPACT staff to develop a two-year implementation plan for the program and capacity building indicators for program management and STI prevention and treatment.

Due to limited funding, a full-time expatriate resident adviser proposed in January 1998 was not installed until the second quarter of FY 2000. Until then, a local resident adviser provided leadership, with technical support and country visits from FHI program management specialists. Once the expatriate resident adviser was in place, additional technical and administrative staff were recruited to support and supervise program activities. Throughout the life of the program, these staff provided technical assistance to the national government and implementing partners to develop and implement programs within IMPACT's intervention domains.

At the request of USAID and the GOR, IMPACT/Rwanda recruited and supported eight technical advisers who were seconded to TRAC, the CNLS, the MOH, and the National Reference Laboratory. The advisers provided technical assistance in areas such as HIV treatment, HIV sentinel surveillance, clinical diagnostics, and financial management.

During the first few years of the program, IMPACT/Rwanda faced several management and implementation challenges, many related to the residual impact of the civil war,

which ended in July 1994. These challenges included personnel shortages, limited local technical capacity (necessitating a heavy reliance on external technical assistance), limited human resource capacity in the public and NGO sectors, and difficulty in establishing IMPACT's technical leadership in the country. In response to these challenges, IMPACT/Rwanda increased collaboration with GOR stakeholders, recruited local staff, and reinforced this staff though external technical assistance visits and trainings.

From January 1998 to December 2006, IMPACT/Rwanda supported over 80 local, regional, and international implementing agencies through subagreement contracts and rapid response fund small grants. In addition to financial support, these implementing agencies received technical and organizational capacity building from FHI technical specialists based in Kigali and outside of Rwanda.

When IMPACT was launched, many local implementing agencies had limited experience in program development and management, and IMPACT's technical and program management support was needed to ensure project success. This support resulted in local implementing agencies that were better equipped to implement and manage HIV/AIDS projects. By the time IMPACT support ended in December 2006, many had already secured alternative funding.

Strategies and activities

In 1998, IMPACT/Rwanda launched activities by reinforcing public sector capacity in syndromic case management of STIs and information, education, and communication (IEC) programs. By 2003, IMPACT's portfolio had expanded to include support for a comprehensive response to the country's HIV/AIDS epidemic—one that aimed to contribute to the national effort to decrease HIV prevalence and mitigate the impact of HIV/AIDS on infected and affected persons.

IMPACT/Rwanda activities included six complementary intervention domains:

- national and community-based prevention programs targeting youth
- clinic-based services targeting the general population, pregnant women, PLHA, and highly vulnerable populations
- preventive communication and care programs targeting populations at highest risk of infection, including sex workers, long-distance drivers, and associated populations
- community-based care and support activities targeting PLHA
- behavioral surveillance
- direct technical assistance to the national government

From 1998 to 2006, IMPACT provided financial and technical support to over 80 partners throughout Rwanda for activities that included

- peer education for youth
- BCC for long-distance drivers and their partners
- school-based sexual risk-reduction and gender equity campaigns
- HIV education and counseling for couples preparing to marry
- workplace HIV programs

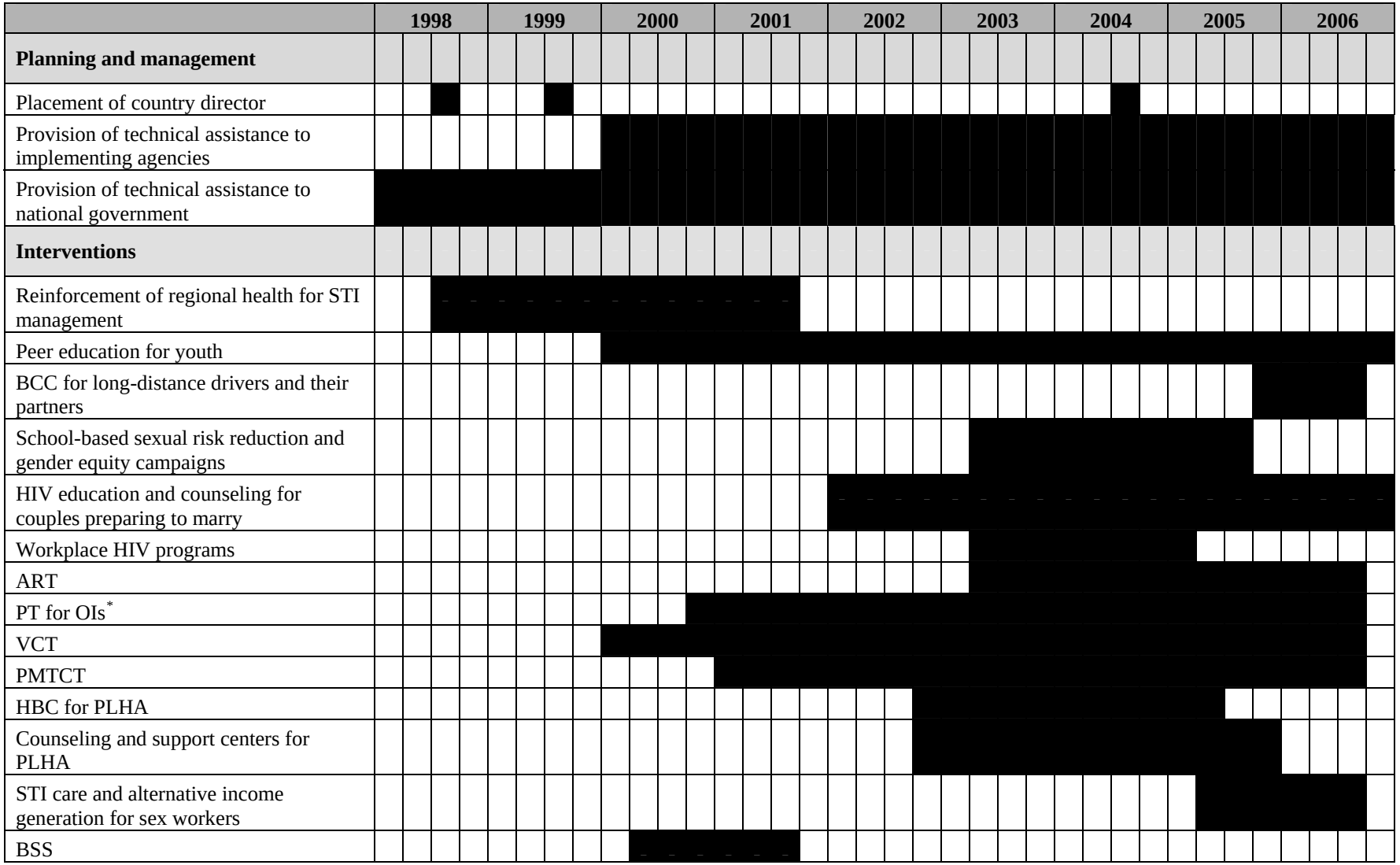
- ART
- preventive therapy (PT) for OIs
- VCT services
- PMTCT
- home-based care (HBC) for PLHA
- counseling and support centers for PLHA
- support services for orphans and other vulnerable children (OVC)
- STI-related care and alternative-income generation of for sex workers

IMPACT also supported several activities that were designed and implemented by FHI technical and program staff. These activities, described later in this report, included

- development of protocols for VCT, PMTCT, ART, and PT
- development and implementation of a national behavioral surveillance survey (BSS)
- assessments of STI diagnosis and treatment practices
- training for health practitioners in counseling, care, and treatment for PLHA, STI diagnosis and treatment, PT, PMTCT, universal precautions, medical waste treatment, and data management
- training for laboratory technicians in HIV diagnostic testing, rapid plasma regain (RPR) testing, and biological testing related to ART
- training of peer educators in HIV prevention, communication, and community mobilization
- development and production of educational and promotional materials for VCT, ART, PT, PMTCT, and HIV prevention
- development and dissemination of provider guides for VCT, PMTCT, PT, ART, HIV prevention, and STI diagnosis and treatment

In all these activities, IMPACT collaborated closely with Rwanda's MOH and associated agencies, particularly TRAC and CNLS. Staff worked effectively with their local counterparts to build local capacity and promote local ownership of activities. Consistent and supportive supervision and mentoring, effective training, effective technical assistance tools, and regular quality assurance and quality control tests helped ensure high-quality programs and services for every element of the IMPACT Project.

Timeline



* Includes pilot project implemented from September 2001 to May 2003. The results of this pilot PT were accepted by the GOR, and the intervention was integrated at other IMPACT-supported sites.

Program results

The project's accomplishments fall into three primary areas.

1. Building local technical and program management capacity

Since 1998, IMPACT/Rwanda has invested considerable time and resources in building the technical and program management capacity of its local partners and key government stakeholders. This included support for implementing subproject interventions, as well as in preparing subproject workplans and routine programmatic, technical, and financial reports. IMPACT provided continuous technical and program management assistance to its partners through organized training seminars, regular supervisory visits, and technical assistance visits. Finally, IMPACT and partner technical specialists collaborated with key ministries to reinforce the capacity of the national government in the areas of protocol development, VCT, PMTCT, ART, PT, surveillance, comprehensive prevention and care, and financial management.

2. Rapidly expanding facility-based prevention and treatment services

IMPACT played an important role in introducing clinical care for HIV patients in Rwanda, starting in 2000 with the launch of four VCT centers. From 2000 to 2006, IMPACT managed a rapid scale-up of HIV clinical care in Rwanda, helping to make services available to those most in need. Rapid scale-up was achieved by significantly increasing service delivery at primary health centers outside of urban areas; supporting a minimum package of counseling and testing, PMTCT, and treatment for OI, including systematic evaluation for PT with cotrimoxazole; and diversifying and intensifying patient follow-up and care. By the end of June 2006, when all facilities were transferred to other donor sources, IMPACT was supporting 42 VCT sites, 35 PMTCT sites, 18 ART sites, and 40 PT/OI sites.

3. Providing quality HIV services to Rwandans in need

IMPACT/Rwanda supported the delivery of essential HIV prevention, care, and treatment services to thousands of Rwandans (table 1). Through regular technical supervision and continual financial and program management support, IMPACT ensured high-quality standards were applied throughout the project. Tables 2, 3, and 4 outline the extent of the program's training of health workers, youth peer educators, and marriage counselors.

Table 1. Clients served by service domain, 1998–2006

	Clients Served		
	Male	**Female**	**Total**
Youth BCC (peer education)	1,015,008	1,023,865	2,038,873
Truckers and their wives (HIV/AIDS counseling)	5,237	4,156 (including 2 truckers)	9,393
Premarital counseling	–	–	27,234
Home-based care	–	–	7,680
STI treatment	n/a	151	151
VCT (tested and receiving post-test counseling)	227,526	240,458	467,984
PMTCT	n/a	59,877	59,877
ART	3,950	8,281	12,231
PT/OI	9,507	18,982	28,489

Table 2. Health workers trained/retrained

Program Area	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**Total**
VCT	n/a	n/a	n/a	132	23	107	129	171	32	594
ART	n/a	n/a	n/a	n/a	n/a	132	28	23	58	241
PMTCT	n/a	n/a	n/a	33	72	80	55	341	366	947
PT	n/a	n/a	n/a	n/a	n/a	147	359	779	191	1,476
STI treatment	314	194	346	177	104	72	0	30	0	1,237
Integration of TB or HIV/AIDS services	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	607	607

Table 3. Youth peer educators trained

	1998–2002*	**2003**	**2004**	**2005**	**2006**	**Total**
Trained	546	938	1,649	249	0	2,382
Retrained	226	253	801	0	0	1,280

* Data are not available per year, but per parts life of project.

Table 4. Marriage counseling
(Byumba Diocese, Nyundo Diocese, Archdiocese of Kigali-Caritas)

	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**Total**
Training of trainers	n/a	n/a	n/a	n/a	0	0	26	0	0	26
Pastoral counselors trained/retrained	n/a	n/a	n/a	n/a	0	124	198	0	0	322
Couples counseled	n/a	n/a	n/a	n/a	2,126	2,000	13,156	9,952	0	27,234

III. OVERARCHING LESSONS LEARNED AND RECOMMENDATIONS

Valuable lessons were learned in the course of the eight-year IMPACT Project in Rwanda, and key recommendations can be drawn from these lessons. This section highlights the overarching lessons and makes corresponding recommendations. The next section includes more specific lessons associated with each major activity area.

Lesson one: Upgrade health facilities

Supporting general upgrades in a health facility helps to ensure the success of HIV service delivery.

Extensive infrastructure improvements were often needed to prepare health facilities to deliver new HIV services. While the type and extent of renovation varied from site to site, IMPACT/Rwanda personnel worked with healthcare sites to ensure a minimal set of infrastructural upgrades to benefit all services, not just those related to HIV care and treatment.

Upgrades and renovations often included the following:

- improvements in water delivery (reservoirs, piping, sinks) and electricity systems (typically solar panels and batteries) that supply maternity, lab, and general facilities
- incinerators and biomedical waste wells that comply with national and international standards and according to the USG Environmental Protection Agency requirements
- basic repairs and furnishings throughout the facility—such as in waiting areas, toilets, in-patient hospital wards, walkways, ventilation, and in office and storage spaces—to ensure safe, sanitary, and reasonably comfortable conditions for patients and health workers alike
- alterations to accommodate new services, such as group counseling, private consultations, new services, and training in nutrition and food preparation
- new equipment for labs, including refrigerators, centrifuges, RPR shakers, coolers for specimen transport, hemoglobin meter, and semi-automatic machines for hematological and biochemistry testing in ART sites
- for maternity service areas, speculums, adult and infant scales, lamps, examination and birthing tables, mattresses, and bedding
- televisions and video players to be used in group education and counseling

Recommendation: When developing HIV service delivery programs in integrated health facilities, funds should be designated for general facility upgrades to improve such service delivery. Strong advocacy is essential to ensure that donors and host government ministries understand the importance of minimal infrastructural upgrades when implementing HIV service delivery programs.

Lesson two: Integrate services within–not across–facilities.

Providing a package of comprehensive care is more efficient and effective than supporting fragmented services across a wide geographic area.

At the start of IMPACT, each HIV service was introduced and delivered individually and supported separately by various technical-assistance NGOs. Since IMPACT-supported sites were geographically separated, technical assistance visits were difficult, time-consuming, and expensive. As the program progressed, IMPACT/Rwanda began supporting the provision of a full range of services at each site, including VCT, PMTCT, PT, care and support, and often ART. In addition, USAID/Rwanda revised its approach to have a single technical assistance partner support comprehensive HIV services in a specific geographic area. IMPACT focused attention on the Southern Province and the Kigali area, while other international NGOs provided technical assistance to other regions under different contribution agreements.

In the end, the integration of services was beneficial for patients, who were thereby able to access all the services they needed at one site. Integration and geographic consolidation of sites was also cost-efficient for IMPACT. It could set up provincial offices from which sites could more easily access financial and technical support and materials. For the sites, these changes meant simplified financial reporting and data collection and reporting, as well as more consistent and comprehensive technical assistance. Overall, the changes promoted synergies between services, simplified referrals, and increased the number of patients reached.

Recommendation: It is essential to support greater integration of services within sites and provide a comprehensive package for HIV patients and those at risk of infection. It is unrealistic for all health clinics to offer ART services, clinics that do not offer such services should be closely linked them with those that do. The range of services much be expanded to include STI and family planning, which have been noticeably insufficient and inconsistent, despite high fertility and STI rates across Rwanda. Condom stock outs, stigma associated with family planning, lack of knowledge about available contraceptive methods, and limited contraception options are all factors that contribute to the spread of HIV. Provincial offices should be maintained to continue efficient and easily accessible technical assistance to local partners and provide support district authorities as they undertake additional technical assistance, supervisory, and quality assurance activities.

Lesson three: Harmonize reports

Reducing the number of reporting tools decreased workloads and simplified the process of collecting and reporting data.

At the start of IMPACT, the project needed to track and report on a host of indicators that were different that those in the reporting requirements of the GOR. The corresponding workload for implementing partners was considerable because they had to report everything twice. IMPACT/Rwanda worked closely with USAID to revise its indicators to be consistent with those of the GOR and as simplified as possible. As the project introduced ART services, FHI shared indicators and reporting tools with the GOR and collaborated to adapted them for national use. The harmonization of indicators for all

services greatly reduced the workload of IMPACT's implementing agencies, enabling them to focus human resources on service delivery. The simplification of data collection forms resulted in more accurate and more consistent reporting.

Recommendation: Donors, technical assistance partners, and local governments should work closely to ensure simplified and consistent reporting requirements for service delivery organizations. Indicators should be reviewed periodically and revised, as appropriate, to ensure that the data collected provide the best possible information for making program decisions, allocating funding effectively, informing policies, and answering critical operations research questions that arise as the epidemic continues to evolve. As local capacity in monitoring and evaluation increases, technical assistance should help local partners better analyze and use the data collected.

Lesson four: Invest time in clarifying long-term goals

Establishing clear and long-term goals at the start of a project can boost the coherence and comprehensiveness of programming.

With the epidemic evolving through the eight years of the IMPACT Project, it was a challenge to establish long-term objectives from the start. As a result of changing priorities, a wide range of activities was implemented; and data collection tools, methods, and needs also changed. This made long-term reporting more challenging.

Recommendation: More guidance from the start about realistic long-term objectives and expectations would help focus and integrate activities and data collection over the life of a project and allow for more efficient use of resources and easier evaluation of project impact. As USAID and other donors continue to support HIV/AIDS programs in Rwanda, it is critical to look closely at IMPACT data, especially ART patient data, to see what additional lessons can be gleaned to inform future programming and service delivery. Donors, technical assistance partners, and the GOR should collaborate to identify gaps in information and additional questions that need to be addressed, and then develop new project monitoring and evaluation plans to fill those gaps. With clear goals and objectives identified at the outset, the data collected will more likely be consistent and accurate through the life of the project, and will be more useful in advancing Rwanda's response to the epidemic.

Lesson five: Build systems that will outlive the program

Providing effective technical assistance must involve building systems that help shift ownership to local counterparts and enable continuous updates in knowledge and skills.

At the start of IMPACT, local capacity to deliver HIV/AIDS services was limited, and there was a considerable shortage of human resources in Rwanda. Over the life of the project, IMPACT/Rwanda made great strides in building the technical capacity of local counterparts and institutions through targeted technical assistance. Planning in a participatory way and consistent collaboration facilitated local support for and ownership of project interventions. This approach contributed to the project's success. However, opportunities to access cutting-edge updates have been insufficient and inconsistent, hindering forward movement and innovation in clinical care.

Recommendation: Technical assistance must be continued at a systems level, in addition to building capacity of individuals. As the epidemic continues to evolve and the social context changes, there is a pressing need for current knowledge. This will only be met if systems are put in place enabling healthcare providers to share the lessons they learn, identify trends, and explore solutions to common problems as they arise. Stronger partnerships between healthcare providers and local and global resources (such as research institutions and universities) will help facilitate these information exchanges and updates. As local capacity increases, it is essential to fully transition technical assistance, supervision, and quality assurance activities to departments at the district level, thereby reducing the need for external technical assistance. The IMPACT program's successes, along with the decentralization of GOR oversight to the district level, have laid a foundation for achieving these objectives.

III. HIGHLIGHTS OF MAJOR ACTIVITIES

Primary Prevention and Community-based Care and Support Services

1. Building local capacity to manage and treat sexually transmitted infections

Implementing agencies	Regional health authorities in Byumba, Kibungo, Kibuye, Kigali, and Gitarama
Target population	Healthcare providers and their clients
Length of support	May 1998–July 2002

IMPACT/Rwanda provided technical assistance to build public sector capacity in STI management and related IEC activities in response to the results of a qualitative study conducted by IMPACT in 1998. This study examined local perceptions and practices related to STIs and found that 27 names for STI symptoms were in use that did not correspond to any medical terms. In addition, at least two common terms used for symptoms were covered all symptoms associated with STIs. The study also confirmed that people were usually seeking treatment late, self-medicated, or failed to complete prescribed treatment doses.

Technical assistance provided by IMPACT/Rwanda focused on improving facility-level capacity to diagnose and treat STIs. The project trained designated personnel at health centers to provide correct information to patients about STI prevention and treatment. This technical assistance was complemented by financial and material support to the regional health authorities for the implementation of project activities.

Aim

- Improve the capacity of healthcare providers to use the syndromic approach to identify and treat STIs.
- Develop protocols and tools that could be used by health providers to correctly diagnose and treat STIs (including training manuals, national algorithms, partner notification cards, and wooden penises).
- Improve supervision by reinforcing the capacity of supervisors.

Key accomplishments

- Trained 34 trainers in syndromic case management who went on to train more than 900 service providers in the five regions.
- Developed and reproduced partner notification cards, treatment referral guide, and STD treatment guide for health providers.
- Trained 198 people to be responsible for HIV/AIDS/STI education and behavior change communication at the clinic level.

- Developed a supervision list for IEC activities at health centers and trained 35 district-based IEC supervisors in its use.
- Completed a study examining the prevalence of the antibiotic-resistant *Neisseria gonorrhoea*. The results of the study were adopted by the GOR and used to update the national STI treatment guidelines.

Impact

An evaluation of 20 health centers (five per region) that examined the case management of patients presenting with specific STI syndromes found that health providers followed national guidelines for 84 percent of cases. This compared favorably with a 1997 AIDSCAP study in three of the regions, which found that only 67 percent of cases were correctly diagnosed.

Lessons learned and recommendations

- Even with continuous technical and financial support, STI supervision remained problematic throughout the project.

- It is recommended that effective supervision mechanisms be designed and implemented to ensure regular supervision so as to reinforce quality assurance throughout the project.

2. Focusing interventions on youth and young adults

In the epoch of HIV, equipping youth to make sound decisions as they enter adulthood and begin their sexual lives has taken on new significance. Youth-centered interventions—whether focused on sexual risk-reduction or on reducing stigmatization of PLHA—are ultimately aimed at changing social norms. IMPACT/Rwanda supported several interventions with youth from 1998 to 2006, all of which prioritized working through existing social structures and institutions. Summary descriptions of these projects and the results achieved are summarized below.

A. Youth peer education and community mobilization

Implementing agencies	Diocese of Byumba, Catholic Youth Organization (JOC), Diocese of Kabgayi, Diocese of Kibungo, Archdiocese of Kigali, Diocese of Nyundo
Target population	Community-based and school-based youth and young adults
Length of support	November 1998–December 2006

In 1998, based on the findings of a qualitative study examining local perceptions of STIs, IMPACT/Rwanda began discussions with local NGOs and associations to launch BCC projects targeting youth. IMPACT collaborated with the Catholic Youth Organization (JOC) to develop training and support materials for peer education. They led to the development of a national peer education program that started in Kigali in 2000 and expanded to several provinces by the end of 2001.

When the peer education program was developed in 2000, IMPACT/Rwanda was preoccupied with identifying a strong and evenly distributed implementation structure through which to channel technical assistance and resources. The Catholic Church served this purpose, with its nation-wide coverage, hierarchical structure, existing youth programs, and ability to contribute inputs to the programs. While managed by the Catholic Church, the program served all youth with least one peer educator identified in each cell (an administrative area) of the intervention zones. In addition, the program managers recruited one peer-educator leader per sector, a supervisor within each parish, and a youth coordinator in each diocese.

When initiated, these programs had the conventional focus on primary prevention targeting unmarried youth. In time, however, they expanded beyond strict youth peer education, and began to address stigma toward PLHA, community mobilization, care and support for HIV-infected and affected individuals and families, and youth self-help enterprises. Diversified implementation approaches accompanied this programmatic expansion. Much more than interpersonal agents of change amongst their peers, several youth involved in the program assumed roles as community leaders.

The selection and training of peer educators and follow-up support were key to the success of this program. Peer educators were selected on the basis of a set of key criteria (resident within the cell, ability to read and write, ready to volunteer). The selection occurred at the level of each administrative cell, at an open meeting organized jointly by the parish and local government. This process ensured that the target community participated from the inception of the project, and that new peer educators began with a vote of confidence from their community. Their intensive and comprehensive baseline training lasted two weeks. It focused on theory and skills relating to 15 themes (such as reproductive health, HIV and STIs, sexuality, and group animation techniques, and was followed by trainer-observed practice sessions. This initial training was continually reinforced by the presence of a youth supervisor at the parish and through regular, mandatory meetings.

Aim

- Involve in- and out-of-school Rwandan youth in the development of HIV/AIDS/STI prevention strategies and programs.
- Improve the knowledge, attitudes, and practices of youth relating to HIV/AIDS/STIs so as to facilitate the adoption of safer behaviors.
- Reduce HIV and STI rates among youth.

Key accomplishments

Conscious of the vulnerability and special needs of PLHA, peer educators in Byumba initiated community events to raise public awareness and solicit community contributions to aid HIV-affected households. In time, community mobilization to reduce stigma and support HIV-affected households became a standard and systematized component of the Byumba program and was gradually expanded to all dioceses.

Additional specific accomplishments of IMPACT-supported youth peer education programs demonstrate the dynamic possibilities of youth prevention programs:

- Over 1,964,989 community-based and 73,884 school-based youth were reached through IMPACT-supported programs.
- Over 680 in-school events were organized that reached 184,870 youth. These included special conferences and debates on specific HIV-relevant themes and topics, games organized by anti-AIDS clubs, sports competitions, and other entertainment that prominently featured HIV messages.
- Over 64,000 in-school youth were reached through a special campaign in 103 secondary schools that reinforced girls' decisionmaking for HIV/AIDS prevention.
- Over 3,609 community mobilization events were organized that reached over 92,006 people.
- Over 4,310 families and 12,564 individuals were served by youth-led support programs for HIV-infected and HIV-affected persons that included house repair and food and clothing donations.
- Working under the direction of local authorities and having the opportunity to play leadership roles had a "mentoring" benefit for the youth peer educators, preparing them for greater responsibility and leadership in the future.

Impact

In July 2005, IMPACT/Rwanda completed a survey of HIV/STI knowledge levels, sexual risk behaviors, and use of VCT. It compared the results from three representative samples of unmarried youth ages15–24 and made use of a pre-intervention baseline sample of 1,417 people drawn from a national surveillance survey conducted in 2000, as well as a follow-up control-site sample in non-intervention site (N=209) and a follow-up intervention site sample (N=210).

Major findings from the evaluation demonstrate the impact of this intervention:

i. Exposure to the intervention—The majority of youth in the intervention site had been exposed to and actively participated in the intervention. Youth in the control site were significantly more exposed to HIV information from the radio, with very few youth (only 11 individuals) ever having participated in peer-to-peer education.

ii. STI knowledge and symptoms recognition—Based on an index score of symptoms free-listed by respondents, the study found that youth in the intervention site (female and male) had much greater familiarity with the most common STI symptoms than their peers in both the control (p=.000) and baseline (p=.000) sites.

iii. HIV knowledge—Significantly higher HIV knowledge levels (measured through an index score derived from a series of HIV knowledge questions) were found between baseline and control (p=.000) and baseline and intervention (p=.000) populations. On the other hand, while the mean HIV knowledge scores were consistently higher in the intervention population than in the control group, these are not statistically significant. One could surmise from this study that radio and other awareness campaigns have resulted in improved HIV knowledge in the country overall since 2000.

iv. Sexual risk—Reports of sexual intercourse ("ever") were significantly lower in the intervention population compared to both baseline (p=.001) and control groups (p=.001). These significant differences derived mostly from the fact that younger respondents reported less sexual activity (ages 15–19, versus ages 20–24). In terms of sexual debut, the intervention thus seems to have had its greatest influence on younger people. Youth in the follow-up control site had equal levels of sexual risk compared to baseline youth, while youth in the intervention site had significantly lower levels of sexual risk compared to both control and baseline populations.

v. Awareness and use of VCT services—Very few of the young people interviewed at baseline were aware of any VCT available in their area. Reflecting significant scale-up of services in the country in the last few years, youth in the control and intervention sites were both aware of VCT services in their communities. However, youth in the intervention site were twice as likely to make use of these services than were youth in the control site (p=.002).

Lessons learned

- Regular meetings allowed peer educators opportunities to share their experiences, learn from each other, develop ideas and plans for joint action, and receive additional training on pertinent topics. These meetings facilitated the organization of activities and data gathering and created camaraderie and shared identity among the peer educators.

- Rather than beginning with didactic information about HIV, peer education sessions opened with questions that elicited active participation (such as "In our neighborhood, what are the different circumstances that get young people involved in sexual relationships?") Within these contextualized discussions of local realities and norms well known to youth, peer educators wove in specific information about HIV, STIs, reproductive health, risk reduction, and other related topics. This approach also allowed for the grounding of new knowledge and skills in the practical realities of the daily lives of young people.

B. School-based campaigns with a special focus on sexual risk and gender

Implementing agencies	PRO-FEMMES Twese Hamwe
Target population	In-school youth
Length of support	July 2000–September 2006

In 2003, IMPACT/Rwanda was asked to provide technical and financial support for the implementation and management of a national mass media and interpersonal communications project by PRO-FEMMES Twese Hamwe, an association of local organizations that promote women, peace, and economic development. The effort was part of a national campaign organized by the CNLS, and was designed to target in-school youth through special sessions on HIV that examined gender relations, sexual risk, and

prevention. There was a special focus on improving girls' decision-making skills to help them understand how their decisions—such as responding to the advances of older men—can lead to compromising and risky situations.

Aim

- Improve the capacity of PRO-FEMMES to develop strategies and coordinate the activities of various associations involved in HIV/AIDS prevention programs.
- Execute least two multimedia campaigns—one to fight stigma and discrimination against PLHA, and the second to reinforce the power of youth, particularly young girls, to prevent HIV/AIDS.
- Reduce HIV and STI rates among youth.

Key accomplishments

- Debate conferences were organized in 101 secondary schools that reached 63,361 youth.
- Three television shows, two radio shows, and two roundtable discussion were developed and transmitted via the national radio network. All productions addressed issues such as stigma and discrimination against PLHA and sexual risk-reduction among young girls.
- A debate conference facilitator's guide for school-based anti-AIDS clubs and local school authorities was developed and disseminated.
- IMPACT/Rwanda's technical and program management assistance resulted in PRO-FEMMES being better equipped to design and manage national campaigns. This is evidenced by the fact that their HIV activities continued with other funding and through independent initiatives after IMPACT support ended in August 2005.

Lessons learned

- When discussion sessions were well prepared using a participatory methodology, young people expressed themselves openly on issues surrounding sexuality and situations or factors that put them at risk. This was especially significant in the context of a co-educational and conservative cultural environment that often limits discussions of sexuality.

- Involving authorities during the entire process, including the preparation phase, was important to the success of the campaign. The implementation plan relied heavily on national networks and government-owned entities, necessitating the active involvement of authorities to negotiate access and ensure acceptability.

C. Supporting HIV education and counseling for couples preparing to marry

Implementing agencies	Diocese of Byumba, Archdiocese of Kigali-Caritas, Diocese of Nyundo
Target population	Couples preparing to marry
Length of support	June 2002–December 2006

In 2002, IMPACT/Rwanda worked with the Diocese of Byumba to develop supplemental materials and guides for premarital couples counseling that included discussions of HIV prevention. Premarital counseling is a required component for young couples preparing to marry in the Catholic Church, and presented a unique opportunity to involve the church in discussions on HIV prevention for married couples. IMPACT/Rwanda provided technical and some financial assistance to produce the materials and support the initial training of pastoral staff who provide couples counseling. The structure and organization of the church ensured nationwide coverage, sufficient staffing, and continuation of the activities after cessation of financial inputs. From inception, IMPACT technical and material support was designed to be phased out quickly in favor of direct support by the Catholic Church.

Aim

- Improve the HIV/AIDS/STI knowledge, attitudes and practices of youth and facilitate the adoption of safer behaviors.
- Reduce HIV and STI rates among youth.

Key accomplishments

- Developed and distributed 1,140 counseling guides for premarital couples to be used by pastoral counselors in discussing HIV prevention.
- Developed and distributed 23,300 HIV prevention posters and 37,750 HIV prevention brochures for couples preparing to marry.
- Trained 597 pastoral counselors on integrating HIV prevention messages into premarital counseling.
- Provided 27,000 couples with HIV prevention messages during premarital counseling sessions.

Lessons learned

- The prevention program for youth came at an opportune moment, responded to an existing need, and was well accepted by the diocese.

- Volunteer counseling and testing were more accepted by youth who took part in the program.

3. Supporting a church mobilization program

Implementing agency	World Relief-Rwanda
Target population	Church communities
Length of support	October 2003–July 2005

In 2003, USAID provided IMPACT/Rwanda with funding to document lessons learned during a four-year, USAID-supported church mobilization program, Mobilizing for Life (MLF), developed by World Relief-Rwanda (WRR). For eight months, WRR field staff collected notes that were disseminated to churches, donors, and governmental and

nongovernmental agencies. The commentary noted key issues to be considered when working with churches on HIV/AIDS and showcased MLF church programs that could be scaled up or replicated.

Based on the findings, USAID provided additional funding to IMPACT/Rwanda to support the continuation of key activities developed during the MLF project. In collaboration with local churches and NGOs, WRR assisted targeted church communities to develop important HIV prevention and support skills and techniques by organizing trainings and supporting the implementation of small interventions at selected churches.

Aim

- Mobilize church communities and reinforce their existing interventions in response to the non-clinical care/support needs of PLHA and OVC.
- Engage church communities in the implementation of community-based HIV/AIDS prevention activities.
- Disseminate previously published materials and publications (in English and Kinyarwanda) that provide information about the role of church communities in the fight against HIV/AIDS and support for PLHA.

Key accomplishments

- Reached 2,725 microcredit clients with HIV prevention messages.
- Reached over 26,000 youth with HIV prevention messages by sponsoring theatre, music, and sporting events.
- Seminars attended by 2,138 pastors and church leaders who received correct knowledge on HIV/AIDS prevention and counseling and were prepared to foster mobilization efforts.
- Engaged 1,073 churches in HIV sensitization activities.
- Mobilized 21,205 church community members to accept HIV counseling and testing.
- Trained 284 church volunteers actively involved in psychosocial counseling in their churches.
- Trained 906 church volunteers in HBC who distributed 8,000 HBC kits.
- Trained 430 church volunteers in OVC identification and care.
- Provided school fees to 4,000 OVC.

4. Supporting community action planning for HIV prevention and stigma reduction

Implementing agency	CARE International-Rwanda
Target population	Communities of Gikongoro, Gitarama, and Ruhengeri
Length of support	November 2002–March 2004

In 2003, IMPACT/Rwanda provided support to CARE International-Rwanda to pilot a capacity building project within the context of HIV/AIDS to address food insecurity,

using a methodology that CARE had used successfully. During the start-up phase, CARE focused on introducing the project to local government authorities in three selected provinces: Gikongoro, Gitarama, and Ruhengeri. In collaboration with these local authorities, CARE defined selection criteria for nine community groups—three per province—who would be invited to participate.

CARE facilitated three sessions with each of the nine groups, developing HIV/AIDS response plans that focused on three priorities identified: poverty, ignorance, and stigma. The response plans included savings-and-loans training related to poverty reduction, sensitization and training of anti-AIDS clubs to reduce ignorance, and visits to PLHA groups to combat stigma. CARE then provided technical assistance to each of these community groups to implement their action plans.

Aim

- Enhance the capacities of communities to analyze how they are affected by HIV/AIDS and engage in causal, rights, and responsibilities analysis to develop effective, community-driven responses to the impact of HIV/AIDS.
- Make operational community HIV/AIDS response plans that build community groups' capacity to respond and provide protection through solidarity networks, sustained interaction, and support through local partnerships.
- Increase the capabilities of selected community groups to provide leadership in HIV/AIDS prevention activities and foster an enabling environment for experience sharing and mutual interaction among infected and uninfected people to reduce stigma and discrimination.

Key accomplishments

- Nine community groups developed and implemented community-driven plans to respond to HIV/AIDS.
- Nine community groups established income-generation activities, four of which turned a profit in their first quarter.
- Within the community groups, 365 of 1,032 members (35 percent of the combined membership) consented to testing for HIV.
- Three new PLHA support associations were founded as part of community response plans.
- Three existing PLHA support associations experienced membership increases, and two of them more than doubled their membership.

Lesson learned

- Developing and implementing community action plans was just the first of many phases of this project. Long-term commitment from the sponsoring organization was required to ensure proper follow-through and to ensure that communities received the necessary technical support to realize their action plans. Fortunately for this project, CARE was able to secure funding to support the programs after IMPACT funding ended.

5. Targeting interventions for groups at highest risk

In 2005, IMPACT/Rwanda launched two initiatives targeting groups at highest risk of HIV infection. An intervention in Kigali provided female sex workers (FSW) with STI care and support for alternative forms of income generation, and a second intervention targeted long-distance truck drivers and their non-regular and commercial sex partners with education about HIV prevention and how to get counseling and testing.

A. Female sex workers

Implementing agency	Biryogo Medical-Social Center
Target population	Female sex workers in Kigali
Length of support	September 2005–July 2006

Epidemiological and biological evidence shows that STIs contribute to the transmission of HIV, and that the prevention and correct treatment of STIs constitute an effective strategy for reducing the incidence of HIV infection, especially among higher-risk groups. Studies have shown that the management of STIs among higher-risk groups contributes to reduced incidence of HIV and other STIs in the general population.

FSW are considered to be a group at higher risk of contracting STIs and HIV. The 2000 IMPACT Behavioral Surveillance Survey (BSS) found that 52 percent of FSW in Butare and Kigali reported having two to five sexual partners during the week before the survey, and 11 percent reported having more than six. The study also found that a significant number of FSW also suffered from STI symptoms.

Based on successful interventions elsewhere and in collaboration with Biryogo Social and Health Center, IMPACT/Rwanda launched a program in STI case management and income generation for FSW in Kigali at the end of 2005. The program applied an "enhanced syndrome management" approach, which combines presumptive treatment for STIs with limited etiologic diagnosis and treatment. The intervention also included education on prevention methods, support for family *mutuelles* fees (insurance fees), HIV counseling and testing, follow-up clinical care as indicated, and access to microcredit.

Aim

- Reinforce the capacity of health providers to diagnose and treat STIs, particularly among FSW.
- Improve access to STI medical treatment services for FSW.
- Offer a minimum package of complementary services to FSW enrolled in the program (such as prevention counseling, referral to HIV testing services, microcredit programs).

Key accomplishments

- 151 women enrolled in the program, and the Biryogo team completed initial examinations of 146, all of whom were diagnosed with and treated for at least one STI.
- 146 of the women agreed to be tested for HIV, of whom 103 (or 71 percent) were found to be HIV-positive.
- 103 of these HIV-infected women enrolled in Biryogo's care and treatment program.
- 93 women were provided with microcredit loans.
- The project was transferred to a new funding source.

Lessons learned and recommendations

- FSW are a high-risk group who are easily infected with and transmit HIV and STIs.
- FSW need clinical services and specific social support.
- The high-risk behavior and high prevalence of HIV and other STIs among FSW support the importance of targeting this group with STI treatment and prevention strategies.

B. Long-distance drivers and their partners

Implementing agencies	Association of Drivers' Spouses (AEC/DUHUGURANE), Association of Heavy Truck Drivers of Rwanda (ACPLRWA)
Target population	Female sex workers, truck drivers, wives of truck drivers, and community members
Length of support	November 2005–May 2006

A study conducted in 2000 found that 40 percent of long-distance truck drivers in Rwanda had sexual relations with non-regular partners in the 12 months prior to the study. The same study indicated that the majority of these truck drivers are ages 30–34 (the age range most affected by HIV in Rwanda), and 70 percent were married. The behavior of these truck drivers may expose their wives and families to HIV infection. Reasons for participating in risky behaviors include a lack of dialogue between the couple, peer pressure, frequent and prolonged separation from a spouse, poverty that pushes women to exchange sexual relations for money, and lack of education.

As part of a larger regional initiative, IMPACT/Rwanda received funding in 2005 to launch an intervention with long-distance truck drivers and their partners. The intervention had two complementary components. The first, implemented by the association of truck drivers' wives (Association des Espouses de Chauffeurs, or AEC), provided HIV-prevention education to FSW, truck drivers' wives, and persons in surrounding communities. It also established an HIV information, support, and referral center to offer better services to truck drivers and community members. The second component, implemented by the association of truck drivers (Association des Chauffeurs

des Poids Lourds au Rwanda, or ACPLRWA), supported a peer education program among truck drivers. Peer educators (themselves drivers) targeted ACPLRWA members as well as transient drivers at key truck stops: Cyangungu (Kamembe, Bugarama, and Rusizi II), Gatuna, and Kigali (MAGERWA). Permanent field supervisors based at these three sites served as liaisons between the peer educators and the Kigali-based coordination office and provided technical and programmatic support to the peer educators.

Aim

- Provide quality HIV-prevention services to truck drivers, their wives, and members of the surrounding communities.
- Orient truck drivers, their wives, and members of the surrounding communities to HIV/AIDS services, such as VCT, PMTCT, STI treatment, OI treatment, ART, and HBC.
- Reduce stigma and discrimination against PLHA.

Key accomplishments

- Developed an HIV informational brochure and VCT information booklet in Kinyarwanda and Swahili.
- Developed five mass-media messages in Kinyarwanda and Swahili focusing on STI symptoms recognition and treatment-seeking at biomedical facilities.
- Trained 70 truck drivers as peer educators.
- Conducted 59 educational sessions with truck drivers, 28 with truck drivers' wives, four with FSW, and 232 with community members.
- Distributed over 11,622 condoms to truck drivers.

Lesson learned

- Many participants expressed the concern that messages encouraging the use of VCT services may not be effective, given the lack of quality services available. Prevention interventions that include VCT promotion must address environmental constraints that prevent participants from following through with desired behaviors.

- Without access to quality VCT services, many participants were unable to seek out HIV testing. Mobile VCT services were suggested by many participants as essential, complementary service to those offered by the project. Providing VCT services in locations where truck drivers spend the night or where they rest after hours was seen as a way to increase acceptance of HIV testing.

6. Assisting community care and support centers

Implementing agency	Society for Women and AIDS in Africa-Rwanda (SWAA/Rwanda)
Target population	Persons infected and affected by HIV/AIDS
Length of support	November 2002–September 2005

IMPACT's partnership with SWAA/Rwanda began in 2002, when IMPACT/Rwanda became the organization's first major supporter. IMPACT/Rwanda supported SWAA/Rwanda as it established three HIV care and support centers that provided counseling and other support services to PLHA. IMPACT technical and program management support was provided to develop SWAA/Rwanda's organizational structure and technical skills to ensure effective management of these centers. As a result of this partnership, SWAA/Rwanda became a national and regional leader in HIV advocacy and support services.

As IMPACT began to phase out its support, a diversified funding base was an important indicator of SWAA/Rwanda's expanding capacity. By the close of the project, SWAA/Rwanda had secured additional USG (US Government) funding, as well as financial support from other donors.

Aim

- Improve access to quality support services for PLHA, including group counseling, individual counseling, home visits, and a telephone hotline.
- Reinforce the capacity of SWAA/Rwanda to develop and manage services for PLHA.

Key accomplishments

- Organized 919 group counseling sessions involving 29,300 individuals.
- Provided 16,228 clients with individual counseling.
- Responded to 7,470 telephone hotline calls.
- Conducted 4,023 home visits.
- Distributed 30,945 IEC materials on prevention and living positively.
- Provided counseling and HIV/AIDs prevention support and provided school fees to 515 OVC.
- Strengthened overall capacity of SWAA/Rwanda.

Lessons learned and recommendations

- A sociocultural support group can be created that can organize events to complement communications activities.

- Constant follow-up should be provided to microproject beneficiaries to ensure that they meet their loan obligations.

- Services such as family planning should be integrated into the centers' programs to optimize access them and support HIV-positive women who are planning to have children.

- Links with other institutions should be developed and reinforced to maximize available resources.

7. Supporting home-based care for PLHA

Implementing agencies	Africare, National Association Supporting PLHA (ANSP+), Rwandan Network of Persons Living with HIV/AIDS (RRP+)
Target population	Persons infected and affected by HIV/AIDS
Length of support	June 2002–October 2005

In June 2002, IMPACT/Rwanda began providing support for the development and implementation of HBC programs for PLHA. In collaboration with the National Association Supporting PLHA (ANSP+), a formative research study was conducted to identify the HBC needs of PLHA and gain perspective on care actually taking place. With these findings, ANSP+ and IMPACT/Rwanda jointly convened a workshop with representatives from 11 governmental organizations and NGOs and associations offering HBC in Rwanda.

Drawing on their experience, and consistent with the HBC guidelines of the MOH, the group developed a user-friendly reference manual in Kinyarwanda to help volunteers provide better care for family members or neighbors living with HIV. The manual addressed a range of themes, including hygiene, psychosocial and spiritual support, management of clinical symptoms, and palliative care.

Later, a smaller group worked to develop and finalize the training curriculum for HBC volunteers. ANSP+ and IMPACT/Rwanda co-hosted a training of HBC trainers for15 community and PLHA associations who went on to train HBC providers associated with the 10 PLHA associations that piloted the manual. After six months of hands-on experience, the guide and training curriculum were revised and finalized, based on the findings of the pilot.

With funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria, ANSP+ expanded the pilot program to 45 PLHA associations. IMPACT/Rwanda continued to support the 10 original pilot associations, and expanded activities to 10 additional associations through a partnership with the Rwandan Network of Persons Living with HIV/AIDS (RRP+). In addition, IMPACT/Rwanda supported HBC activities being implemented by Africare through a regional HIV/AIDS intervention.

Aim

- Reinforce the capacity of PLHA associations to provide quality HBC services to PLHA.
- Develop and produce tools for volunteer care providers.
- Reinforce the capacity of national network associations to manage activities and provide technical assistance to partner organizations.

Key accomplishments

- 137 volunteers trained in HBC for PLHA.
- 7,680 PLHA provided with HBC services.

- HBC guidebooks for volunteers developed and adopted by various partners.
- 260 copies of the HBC volunteer guidebook disseminated.

Lessons learned

- The more clients who are tested, the greater the need is for medical and psychosocial care.

- The number of PLHA in associations increased, but the number of volunteers did not rise proportionally.

- *Mutuelle* membership improved the health of many PLHA.

8. Supporting microcredit for PLHA

Implementing agencies	Society for Women and AIDS in Africa-Rwanda (SWAA/Rwanda), World Vision-Rwanda
Target population	Persons infected and affected by HIV/AIDS
Length of support	January 2003–September 2005

Beginning in 2003, IMPACT/Rwanda provided funding to World Vision-Rwanda (WVR) to manage a pilot microcredit program targeting PLHA and provided technical assistance to a local association that managed microcredit loans, including the identification of beneficiaries and follow-up reporting. This pilot was meant to demonstrate the feasibility and impact of microcredit programs on the economic wellbeing of PLHA.

The program was implemented by WVR using a strategy developed in Rwanda of working with vulnerable people, including HIV-positive people, on vocational rehabilitation, business development, and revolving-fund management. WVR later provided technical guidance and support to SWAA/Rwanda to implement and manage a similar microcredit program in each of its three care and support centers.

Aim

- Develop the economic capacity of PLHA by supporting income-generating activities that can provide a sustainable income to their families.

Key accomplishments

- 205 PLHA provided with microcredit loans.
- 208 PLHA provided with training in business development and management.
- 79.5 percent of those receiving loans met the obligations of their loan package.

Lessons learned and recommendations

- Working through a local association with deep ties to the community sometimes posed a challenge, as certain members reported cases of bias in the grant-making process. This would indicate that strict selection standards and procedures are necessary from the outset of any microcredit program to avoid cases (or the perception) of favoritism.

- The problem of credit being used for unintended purposes persisted throughout the project, albeit as rare occurrences. A few participants acknowledged diverting a part of their credit to purchase cattle or to keep as a security blanket for future misfortunes. Consequently, participants should be continually sensitized that the capital should never be diverted for unintended purposes.

Behavioral Surveillance

1. Conducting a first-round BSS with three target groups

Implementing agency	IMPACT/Rwanda
Target population	Unmarried youth (ages 15–19), female sex workers, and truckers
Length of support	March 2000–April 2001

At the request of the National AIDS Control Program (NACP), IMPACT/Rwanda conducted in 2000 a first-round BSS with three key target groups in the six provinces: unmarried youth ages 15–19 (N=8,320), female sex workers (N=699), and truckers (N=481). In collaboration with the NACP and authorities from the targeted health regions, IMPACT/Rwanda developed the survey protocol and questionnaires, recruited interviewers and supervisors, and sensitized communities about the survey.

Data collection for the youth survey spanned several months, covering six prefectures and 7,000 youth. Data collection for FSW and truck drivers followed, and data entry occurred simultaneously. All data collection concluded in 2000, while data entry, analysis, and report writing continued through early 2001. At the request of CDC, funds designated for a second-round BSS were redirected to procure laboratory equipment for designated CDC-funded clinical sites.

Aim

- Reinforce the capacity of the national government to develop and implement a national BSS.
- Provide updated behavioral information to the national government and key stakeholders.

Key accomplishments

- 500 copies of each report were printed and disseminated throughout Rwanda.

- A national dissemination workshop was organized to present the findings of the survey to local NGOs and other key stakeholders.
- Throughout the BSS process, IMPACT/Rwanda worked closely with TRAC and was able to build local capacity in surveillance.

Clinical Services

IMPACT played an important role in the introduction of clinical care services for HIV in Rwanda, starting in 2000 with the launch of the first IMPACT/Rwanda-supported VCT center. The scale-up of IMPACT/Rwanda-supported HIV clinical care services had three progressive phases: initial take-off, expansion, and consolidation.

Take-off, 2000–02: Rapid HIV testing was a pre-condition for the take-off of clinical care services. The first services in Rwanda to use rapid tests were four IMPACT-supported VCT sites in 2000. The initial focus of these efforts was to introduce HIV counseling and testing in hospital settings and in specialized VCT centers. Gradually, these services were extended to primary health centers (PHCs) throughout the country. Introduction of PMTCT through antenatal and maternity services began the following year and picked up considerably in 2003 with financing provided through the President's PMTCT Initiative.

In 2001, the Ministry of Health, with technical assistance from IMPACT, began a pilot intervention to examine the acceptability and feasibility of offering prophylactic treatment for OIs within the Rwandan healthcare context. The results of this pilot laid the groundwork for scaling up PT programs and developing patient education materials and provider job-aides.

In addition, with support from IMPACT, the first national protocols for VCT and PMTCT were developed by the GOR in 2002. During this period, a national quality assurance system was established and laboratory capacity strengthened, a national training program was developed and instituted, and client education and provider job-aides were produced to ensure quality of care.

Expansion, 2003–06: The expansion phase was characterized by three objectives:
i. Taking services to people in need—This implies a significant scale-up of the number of service delivery sites, especially at PHCs outside of urban centers. The authorizing of select nurses to prescribe first-line ART was implemented during this phase, which accommodated efforts to take services to the people most in need. (The nurse pilot-phase was not financed through IMPACT/Rwanda.)

ii. Securing a comprehensive mix of services as part of a minimum package of basic HIV care within the system of primary healthcare—This refers to integrated services as defined by the GOR. With PEPFAR resources IMPACT/Rwanda supported a minimum package of VCT, PMTCT, and treatment for OIs, including systematic evaluation for PT with cotrimoxazole. In 2005, significant advances were made in this direction.

iii. Diversifying and intensifying patient follow-up and care—This refers to more systematic referral for HIV testing of clinically suspect patients, more systematic referral of HIV-positive individuals for TB screening, evaluation for PT, clinical evaluation for ART (where possible), follow-up monitoring, and better clinical care for infants and children.

Consolidation, 2005–06: Until this phase, most partners were responsible for procuring their own materials and drugs. The introduction of nationally coordinated drug procurement in 2005 represented an important step in building local government capacity, streamlining and making systems consistent throughout the country, and consolidating HIV clinical care services within existing health system structures. As a result, IMPACT/Rwanda was able to focus more attention and resources to service delivery.

In 2006, provider-initiated testing, the decentralization of care and treatment to the PHC level, and the strengthening of the ability of districts to plan, manage, and supervise HIV clinical care services as part of their overall health sector management, started to make a major difference, substantially advancing the norming (routinization and integration) of HIV clinical care service delivery in Rwanda's health system.

Aside from sheer expansion in the number of service sites, there were also significant shifts in programmatic preoccupations. Where the take-off phase focused on establishing testing services and promoting their use, provision of patient care became an emphasis in the expansion phase. Beginning in 2005 and a major thrust in 2006 was the mainstreaming and normalizing of HIV services within the Rwandan healthcare system.

1. Supporting voluntary HIV counseling and testing

Implementing agencies	AFRICARE-Gikongoro, ARBEF, Biryogo Medical-Social Center, Bungwe HC, Byumba Hospital, Gihara HC, Gitarama HC, Gitwe HC, Gitwe Hospital, Jenda HC, Kabgayi Hospital, Kabona HC, Kanombe Military Hospital, Karengera HC, Kayove HC, Kibeho HC, Kibungo Hospital, Kibuye Hospital, Kicukiro HC, Kigufi HC, Kirambi HC, Kirinda Hospital, Kivumu HC, Mbuga HC, Muganza HC, Mugina HC, Mugonero Hospital, Mukungu HC, Murara HC, Murunda Hospital, Mushishiro HC, Mushubi HC, Muyanza HC, Muyunzwe HC, Ngarama Hospital, Nyabikenke HC, Nyamagabe HC, Nyamata Hospital, Nyarusange HC, Population Services International, Remera-Rukoma HC, Ruhango HC, Ruhuha HC, Ruli Hospital, Ruramba HC, Rwandan AIDS Information Center (CRIS), Shyogwe, Rugege HC, Runyombyi HC, Rambura HC, Rwamagana Hospital, Shyira Hospital
Target population	General population
Length of support	May 2000–June 2006

In 2000, IMPACT/Rwanda launched support for its first VCT project with the Rwandan AIDS Information Center, which was designed to reinforce local capacity in the testing and development of a reference center for district VCT services. Three additional VCT sites were launched the same year.

IMPACT/Rwanda later obtained a waiver to procure rapid tests, setting the stage for the rapid expansion of VCT services. To prepare for the eventual training of health workers, IMPACT/Rwanda entered into an agreement with the National Laboratory of Retrovirus Infections to provide technical assistance in training, supervision, and quality control related to rapid HIV tests. By the end of May 2006, IMPACT had supported the development and launch of 53 VCT sites throughout Rwanda.

IMPACT/Rwanda VCT programs benefited from strong national leadership, which created a favorable environment for delivering VCT. Generalized and targeted "Know your status" campaigns led by the CNLS stimulated substantial popular demand for HIV testing. National service standards, training programs, quality assurance mechanisms, and coordination were part of the TRAC-facilitated rapid scale-up and ensured that VCT programs were effective.

At sites supported by IMPACT/Rwanda, HIV-positive clients were systematically connected with PLHA associations connected to the health facilities that could provide necessary support to those diagnosed with HIV infection. HIV-positive clients were also systematically referred to treatment and care services and provided with family insurance benefits, depending on need.

As IMPACT/Rwanda continued to reinforce and expand services for VCT, a movement developed toward routine and provider-initiated diagnostic testing through referrals. After September 2005, following the updated technical manual produced by the National Integrated Program for Leprosy and Tuberculosis, IMPACT/Rwanda made a concerted effort to improve integration of HIV and TB testing and treatment. Individuals testing positive for HIV were routinely screened for TB and oriented to TB services for follow-up diagnosis and treatment, if needed. Alternatively, TB patients were systematically referred to HIV counseling and testing services, resulting in a high number of cross-referrals between the TB and HIV testing services at many integrated sites.

Aim

- Reinforce the capacity of health providers to provide HIV counseling and testing services.
- Improve access to quality HIV counseling and testing services.
- Offer a minimum package of referral services to persons testing HIV-positive.

Key accomplishments

- 240,767 women received pre-test counseling; of 99.9 percent accepting to be tested, 12.7 percent tested positive.
- 227,760 men received pre-test counseling; of 99.9 percent accepting to be tested, 8.8 percent tested positive.
- 98.1 percent of women and 98.0 percent of men who were tested received post-test counseling.
- 471 HIV-positive patients were examined for TB, based on screening results.
- 545 TB patients accepted to be tested for HIV.

- Close to 70 percent of all patients on ART at IMPACT-supported sites were brought to those services as a result of VCT, demonstrating that it is an important strategy for the expansion of ART.
- All VCT sites were transferred to alternative funding.

Impact

In 2004, IMPACT/Rwanda conducted a study with 5,200 clients that compared sexual behaviors before and after VCT and analyzed the impact of VCT services on client behavior. Clients were enrolled in a panel study that collected data at baseline and three follow-up intervals: at one month, three months, and six months. Sexual risk data—including the number and kind of sex partners and condom use—were collected for a sub-sample of participants who reported sexual activity in the last three months.

Findings indicate that VCT is a key strategy for prevention:

- Analysis of behavior change at the individual level showed net decreases in the number of all sex partners between baseline, three-month follow-up (12.2 percent net decrease), and six-month follow-up (11.7 percent net decrease).
- Of 715 HIV-negative respondents who reported sexual activity at baseline and the six-month follow-up, 12.3 percent reported a decrease in the number of their sex partners during the interval.
- Specific to higher-risk sex, reductions in non-regular partners and sex workers were reported (9.1 percent at baseline, compared to 1.7 percent at the three-month follow-up and 1.3 percent at the six month follow-up).
- Among all the respondents, condom use increased with non-regular sex partners after VCT (33.6 percent at baseline, compared to 54.4 percent at three months and 65.2 percent at the six-month follow-up).
- HIV-negative respondents reported increased condom use with non-regular partners (33 percent at baseline, compared to 60 percent at three months and 64 percent at the six months).

Lessons learned and recommendations

- Where appropriate, support for VCT service delivery should include support for the reinforcement or development of PLHA support associations.

- HIV-positive VCT clients should be systematically referred to treatment and care services and, when possible, provided with family insurance benefits (*mutuelles*).

- Recognizing the value and efficacy of VCT in Rwanda in ART scale-up does not preclude the need to better promote and improve uptake of couples counseling and testing.

- There is a need to increase and routinize provider-initiated testing.

2. Supporting prevention of mother-to-child transmission of HIV

Implementing agencies	Biryogo Medical-Social Center, Bungwe HC, Gihara HC, Gitarama HC, Gitwe HC, Jenda HC, Kabgayi HC, Kabona HC, Karengera HC, Karangara HC, Kayove HC, Kibeho HC, Kigufi HC, Kirambi HC, Kivumu HC, Mbuga HC, Muganza HC, Mugina HC, Mukungu HC, Murara HC, Mushishiro HC, Mushubi HC, Muyanza HC, Muyunzwe HC, Nyabikenke HC, Nyamagabe HC, Nyarusange HC, Rambura HC, Remera-Rukoma HC, Ruramba HC, Rugege HC, Ruhango HC, Ruli Hospital, Runyombyi HC, Shyira Hospital, Shyogwe HC
Target population	Women attending ANC services
Length of support	May 2000–June 2006

In 2001, IMPACT/Rwanda launched services promoting the prevention of mother-to-child transmission of HIV (PMTCT) at two VCT sites, Biryogo Medical-Social Center and Ruli Hospital. The new programs established a link between the antenatal care (ANC) and VCT services at the health facilities.

Pregnant women seeking ANC were offered HIV testing, and those who tested HIV-positive had the option of participating in the PMTCT program. It included provision of nevirapine (NVP) to the mother and baby, as well as socioeconomic assistance for the mother if needed. In the first three months of service, Biryogo tested 289 women for HIV; of these 34 (12 percent) were HIV-positive and enrolled in the full PMTCT program.

From 2002 through 2005, IMPACT/Rwanda experienced a dramatic scale-up in the number of PMTCT service delivery sites and the number of women served through these sites. In one year alone, IMPACT/Rwanda virtually tripled the number, from 12 in December 2004 to 35 in December 2005. As a result, the number of women who had tested and then enrolled in IMPACT-supported PMTCT programs doubled too, increasing from 10,331 in 2004 to 20,716 women in 2005.

As the number of IMPACT-supported PMTCT sites grew, IMPACT/Rwanda made its approach more comprehensive, integrating PMTCT services into the primary healthcare (PHC) menu of services. By the end of the project, IMPACT/Rwanda had added the following to its standard package of clinical support for PMTCT.

- *Systematic syphilis screening for all pregnant women.* Variability in the knowledge and skills levels of clinicians with respect to syphilis treatment and the national protocol was observed. Inappropriate clinician responses to cases of syphilis in pregnant women indicated insufficient attention to improving STI case management for ANC patients. To better serve STI-infected women and their at-risk infants, IMPACT/Rwanda committed to improving clinician knowledge and skills in STI treatment within the context of PMTCT service delivery.
- *Systematic referral of ANC clients to other PHC services.* The importance of patient education and referral was emphasized during PMTCT trainings and other supportive

supervision. All pregnant women were encouraged to make regular ANC visits and use a range of existing maternal and child health services, such as growth monitoring, vaccination, and family planning.

- *Iron and folic acid supplements for all pregnant women starting in month six of pregnancy.* Although nutrient supplementation was called for in the national ANC guidelines, most PHCs had highly irregular stocks and/or inconsistent dispensation practices within their ANC services. Iron and folic acid were therefore systematically included in subagreement budgets, and routine administration of these nutrients to all ANC clients according to the national protocol was encouraged.
- *Universal precautions in infection control*. IMPACT/Rwanda routinely supported the construction of incinerators and biomedical waste wells, the provision of rubber gloves, and clinician training in infection prevention measures for clinical practice. In this way, efforts to scale-up PMTCT contributed considerably to the prevention of nosocomial and health worker infections.

Since syphilis screening and treatment in pregnant women, holistic preventive care, appropriate referrals between services, nutrient supplementation for pregnant women, and systematic infection prevention measures are all basic and essential practices in primary healthcare, the introduction of PMTCT services served as a sort of refresher training for practitioners in these services. As a result, in one degree or another, IMPACT support for PMTCT services has significantly improved the overall quality of prenatal and postnatal care in Rwanda.

IMPACT/Rwanda's minimum package of services also expanded to include other support services, including the following:

- *Assistance to indigent women and families***.** IMPACT/Rwanda supported various kinds of assistance to indigent women and families. Selected through PHC social committees, IMPACT/Rwanda supported maternity fees to encourage HIV-positive women to return to the clinic to give birth, family insurance fees to encourage adherence to care and family testing, and infant food supplementation before and after weaning.

- *Support for services in HIV/AIDS care and treatment***.** IMPACT supported a range of specific services for HIV-positive women and infants exposed to the virus:
  - orientation to PLHA associations associated with the PHCs, through which women benefited from psychosocial and, to varying degrees, material support
  - educational materials (on PMTCT, PT, OIs, STIs, etc.) that reinforced information learned in one-on-one counseling and in clinical consultation
  - referral for evaluation for PT with cotrimoxazole, treatment of OIs, and ART evaluation where possible.
  - educational sessions on child weaning, nutrition, and food preparation
  - in PHCs with sufficient staff, home visits, especially to track women who had not returned for follow-up care
  - ARV PT for mothers and children, according to national guidelines, and systematic treatment with cotrimoxazole for HIV-exposed infants

- confirmation testing of infants at 15 months and referral of HIV-positive children for follow-up clinical staging and care

Aim

- Reinforce the capacity of health providers to provide PMTCT services.
- Improve access to quality PMTCT for pregnant women and their exposed infants.
- Offer a minimum package of services to HIV-positive women and their exposed infants.
- Reduce the transmission of HIV from mother to child.

Key accomplishments

- 59,877 women opted to be tested for HIV, which represented 90.7 percent of total new ANC clients.
- 98.5 percent of women who were tested returned for their results.
- 4.9 percent of women tested were HIV-positive.
- All HIV-positive women were supplied with NVP in their third trimester.
- 1,667 HIV-positive women took NVP during childbirth.
- 719 exposed infants were tested at 15 months, representing 87 percent of the total.
- 1,653 out of 1,667exposed infants enrolled in PT program.
- 43.2 percent of male partners accepted HIV testing and 5.5 percent were HIV-positive.
- 40,881 women tested for syphilis (RPR-tested).
- There was high adherence of pregnant women in the program. The number of women enrolled in FHI-supported PMTCT programs doubled between 2004 and 2005: in 2004, 10,331 women were tested, representing 83.9 percent of 12,325 women attending ANC services; in 2005, 20,716 were tested in 2005 (95.3 percent of 21,738 women attending ANC services). Almost all pregnant women tested (99 percent) came back to receive their test results and post-test counseling. Of 501 HIV-positive women who gave birth in 2005, 470 (93.8 percent) completed prophylactic treatment with ARV.
- Of exposed infants tested at 15 months, 92.6 percent were found to be HIV-negative, thereby averting 666 new infant HIV infections.

Lessons learned and recommendations

- Service delivery sites should have a feasible plan to maximize the number of women enrolled in the PMTCT program who return to the health facility to give birth. Of the 501 HIV-positive pregnant women in IMPACT-supported PMTCT programs, 72 percent (361) gave birth in health facilities during 2005. This compares to a national rate of about 30 percent of women who give birth in health facilities.

- PMTCT service delivery provides an opportunity to support the improvement of related ANC and PHC services. Through facilities improvement, supportive supervision, and continuous training and retraining opportunities, it is possible to

improve general health services as well as those specific to PMTCT by improving the physical environment and capacity of health practitioners.

- In 2005, a wide range of male-partner acceptance rates was observed across sites, from 13 percent at Rugege Health Center to 90 percent at Bungwe Health Center. This suggested that health center experience in providing PMTCT is an important variable in successfully promoting HIV testing among male partners. In 2005, for PHCs with at least six months' experience delivering PMTCT, 52 percent of male partners, on average, agreed to be tested. For PHCs with less than six months' experience, only 21 percent agreed to be tested, on average. Given the demonstrated value of couples counseling for prevention within discordant couples, a major preoccupation for PMTCT programming should be to improve couples counseling and testing rates within PMTCT settings. Data from PMTCT sites to date suggest that men in urban areas are more resistant to VCT than men in rural areas.

- Service delivery sites should be supported to increase the acceptance rates of modern contraceptives among HIV-positive women. Many service delivery sites are affiliated with the Catholic Church, and therefore do not offer contraceptives. Additionally, occasional stock shortages at public sites make it difficult for some women to obtain contraceptives.

- Programs should give priority to a strategy that encourages exchanges between PHC staff. Learning from pragmatic, PHC-grounded successes of their peers often provides partners with the motivation and practical problem-solving approaches needed to confront effectively any deficiencies in couples counseling and acceptance of contemporary methods of contraception.

3. Supporting preventive therapy for opportunistic infections

Implementing agencies	Muyanza HC, Byumba Hospital, Ruli Hospital, Gihara HC, Gitarama HC, Gitwe HC, Jenda HC, Karangara HC, Kibeho HC, Kirambi HC, Kivumu HC, Mbuga HC, Muganza HC, Mugina HC, Mushishiro HC, Mushubi HC, Muyunzwe HC, Nyabikenke HC, Nyamagabe HC, Nyarusange HC, Rugege HC, Ruhango HC, Runyombyi HC, Ruramba HC, Shyogwe HC, Kigeme Hospital, Gitwe Hospital, Kabgayi Hospital, Remera Rukoma Hospital, Kabona HC, Karengera HC, Kayove HC, Kigufi HC, Mukungu HC, Murara HC, Rambura HC, Biryogo Medical-Social Center, Gikondo Medical-Social Center, Kicukiro HC, Masaka HC, Nyamata Hospital, Rwamagana Hospital
Target population	HIV-infected patients and exposed infants
Length of support	May 2001–June 2006

In 2001, IMPACT/Rwanda agreed to pilot test an intervention for the prevention of TB, using INH and Bactrim for several other opportunistic infections. In August and September of 2001, a test protocol was implemented at VCT sites in the Kabgayi and Rwamagana district hospitals to provide a minimum of medical follow-up for VCT

clients who were HIV-positive. In the initial weeks of the pilot, demand for the prevention service far exceeded expectations.

In 2004, in collaboration with the National Integrated Program for Leprosy and Tuberculosis (PNILT), IMPACT/Rwanda completed and presented the results of a pilot study intervention on prophylactic therapy for TB and other opportunistic infections. Subsequent to the study, IMPACT/Rwanda began integrating PT with cotrimoxazole into the PMTCT and ARV services offered by their partners. The greatest innovation in this process was the inclusion of PHCs in the scale-up, which broadened the reach of the intervention and maximized the number of HIV-infected patients who could benefit from PT. In the context of an incomplete process of ART scale-up, making PT widely and easily available to HIV-infected patients was of great importance.

In addition to laboratory and other infrastructure upgrades at health facilities that benefited all PHC patients, adding PT services also provided critical training and experience to PHC clinicians in HIV-patient assessment (existence of OIs, clinical staging, etc.), follow up, and treatment of OIs. This experience prepared these health providers to assume greater responsibility in HIV-patient care, including the provision of ARVs. As ART scale-up in Rwanda proceeded, the value of PT-experienced clinicians at PHCs increased.

Following national instructions disseminated in 2005, IMPACT/Rwanda began supporting PMTCT partners to provide PT to HIV-exposed infants in June of that year. IMPACT/Rwanda progressively assisted partners offering PMTCT to add this important service for infants until all 36 of them were providing prophylactic treatment to exposed infants.

Aim

- Reinforce the capacity of health providers to diagnose and treat OIs
- Improve access to quality PT services for HIV-infected patients and exposed infants

Key accomplishments

Tables 5 and 6 reveal the reach of this activity.

Table 5. Preventive therapy—infants

Clients served	**Female**	**Male**	**Total**
Infants evaluated for PT	550	593	1,143
Infants placed on PT	518	529	1,047

Table 6. Preventive therapy—PLHA

Clients served	**Female**	**Male**	**Total**
PLHA evaluated for PT	18,432	8,914	27,346
PLHA placed on PT	13,255	6,687	19,942

Lessons learned

- When expanding PT services, there should be an identified need for such services. In addition, the health center must be capable of determining if a client is eligible for PT services and must be able to provide follow-up.

- A PT checklist can improve the quality of services. If a checklist is provided to assist health workers in determining the staging of a patient, it will help them determine if the patient is eligible for PT.

- By offering PT services, health centers gain more experience, improve their competency in the care of PLHA, and become more prepared for delivering ART services.

- PT activities using cotrimoxazole can be integrated into a minimum package of services offered to PLHA at the health center level.

4. Supporting antiretroviral therapy

Implementing agencies	Biryogo Medical-Social Center, Byumba Hospital, Gikondo Medical-Social Center, Gitwe Hospital, Kabgayi Hospital, Kicukiro HC, Kigeme Hospital, Kirambi HC, Kivumu HC, Masaka HC, Mugina HC, Muyanza HC, Nyabikenke HC, Nyamata Hospital, Nyarusange HC, Remera Rukoma Hospital, Ruhango HC, Ruli Hospital, Ruramba HC
Target population	HIV-infected patients
Length of support	February 2003–June 2006

In February 2003, Rwanda became the first country in the world to benefit from IMPACT and USAID support for ART when the first four patients were served at Biryogo Medical-Social Center. During the initial phase, while waiting for a waiver to procure ARVs with USAID funds, FHI provided funding for ARVs for up to 60 patients for one year. Once the waiver was secured, scale-up began with the launch of ART services at Kabgayi Hospital.

To prepare sites for the introduction of ART services, IMPACT/Rwanda provided intensive technical and financial support. This support included the training of medical, pharmacy, and laboratory personnel; improvement of commodity management; the renovation and equipping of health centers and labs to support the new interventions; provision of educational support materials; and recruitment of additional qualified staff. ART service scale-up continued through to the end of the project, with IMPACT/Rwanda supporting ART services throughout the Rwandan health system—from hospitals to PHCs.

Beginning in 2005, IMPACT/Rwanda supported partners to increase the number of children on treatment by redoubling efforts to educate HIV-infected parents about the importance of getting their children tested for HIV and facilitating access to services such

as free testing and family *mutuelles* fees. IMPACT/Rwanda worked closely with each of its clinical partners to develop individualized strategies that would increase child testing and follow-up care.

Some patients' prescriptions were changed in the course of their treatments, mainly due to side effects and the presence of OIs. The vast majority of patients continued to respond well to first-line treatment. Relatively few patients experienced side effects from the drugs, and most side effects were minor in nature, occurred early in the course of treatment, and dissipated in due time. A few patients, however, experienced serious side effects and conditions were observed, most notably Stevens-Johnson Syndrome and hepatotoxicity.

Maintaining the health of HIV-infected patients is key to the success of any ART program. To improve HIV-infected patient access to other primary healthcare services, IMPACT/Rwanda supported the payment of health *mutuelle* memberships for HIV-infected patients and their families. For patients with families, providing a family membership served as an incentive for them to bring their family members into the clinic for testing and follow-up. IMPACT/Rwanda's support for health *mutuelle* memberships could thus be considered an important element for implementing the "family approach" to HIV-patient care.

Aim

- Reinforce the capacity of health providers to treat and monitor the health of PLHA.
- Improve access to quality ART services for HIV-infected patients and their families.

Key accomplishments

- 18 ART sites initiated under IMPACT.
- 585 healthcare providers trained in provision of care and treatment for PLHA.
- 11,144 adult patients (ages 15 and up) enrolled in ART, of whom 4,385 initiated ART.
- 1,087 children patients (ages 0–14) enrolled in ART, of whom 343 initiated ART

Impact

- IMPACT/Rwanda initiated 4,728 patients on ART. Of these, only 290 died and 61 abandoned treatment.
- IMPACT/Rwanda also developed monitoring tools, patient information packets, and provider tools and job aides for ART services that were subsequently adopted nationally.

Lessons learned and recommendations

- Rapid expansion of ART programming was severely limited by a national shortage of doctors qualified to prescribe ARVs and monitor ART patient health. ART program managers must find creative solutions to this problem. To this end, FHI received non-IMPACT funding from USAID to design and launch a pilot project providing support to nurses who were asked to monitor ART patient health. The preliminary results of

this pilot indicate that using nurses is a feasible option in settings where doctor shortages limit the reach of an ART program.

- High levels of patient adherence can be achieved by making sure patients are educated and briefed before they initiate ART. Related supports are education materials, job aides, and use of the “buddy” system.

- It is important to test for viral load before advancing to second-line treatment and to confirm failure of the first-line treatment.

APPENDICES

1. Country program financial summary

From January 1998 to December 2006, USAID committed US$30,091,183 to IMPACT/Rwanda. The program closed on December 31, 2006.

All clinical care services initiated under the IMPACT Project are being continued by FHI and local partners under a one-year cooperative agreement, CA 696-A-06-006, and separate cooperative agreements awarded to FHI, Intrahealth, EGPAF, and Columbia University.

Some of the community service activities initiated by IMPACT are being continued by CHF International under a five-year cooperative agreement from USAID.

2. Technical documents and training materials, 1998–2006

Antiretroviral therapy

Factors influencing treatment adherence in people living with HIV/AIDS. FHI, 2003. (Published in French)

Basic information that ARV Clients must know. FHI, 2003. (Published in Kinyarwanda)

The advantages of good ARV treatment adherence. FHI, 2004. (Published in Kinyarwanda)

How to Take ARV. FHI, 2004. (Published in Kinyarwanda

Behavior change communication

Peer educator guide. FHI, 2003. (Published in French)

Create your family around fidelity. FHI, Kigali Catholic Archdiocese, Byumba Catholic Diocese, Nyundo Catholic Diocese, 2003. (Published in Kinyarwanda)

Discussion guide for premarital counseling. FHI, Kigali Catholic Archdiocese, Byumba Catholic Diocese, Nyundo Catholic Diocese, 2003. (Published in Kinyarwanda)

National BCC strategic framework for HIV/AIDS/STI in Rwanda. FHI, CNLS, 2004. (Published in French)

The problem of HIV/AIDS facing Rwandan women. FHI, PRO-FEMMES, 2004. (Published in French)

Youth, let's adopt good behaviors to prevent HIV/AIDS: A manual for peer educators. FHI, 2004. (Published in Kinyarwanda)

National HIV/AIDS prevention plan 2005-2006. FHI, CNLS, 2004. (Published in French)

Private sector and parastatal policy for the fight against HIV/AIDS. FHI, FRSP, 2004.

Guide for the integration of HIV/AIDS programs in private enterprises and parastatals. FHI, FRSP, 2004. (Published in French)

National operational guide for the implementation of BCC programs to fight HIV/AIDS. FHI, CNLS, 2005. (Published in French)

Strategy for the reinforcement of girls' decision-making power to prevent HIV/AIDS. FHI, PRO-FEMMES, 2005 (Published in French)

Prevention of mother-to-child transmission, preventive therapy, and sexually transmitted infections

Images, therapeutic methods and communication concerning sexually transmitted diseases in Rwanda: The case of Kigali health region. FHI, 1999. (Published in French)

Evaluation of the quality of STD care in the health regions: Byumba, Gitarama, Kibungo, Kigali. FHI, 1999. (Published in French)

Prevalence of antibiotic resistant Neisseria gonorrhoeae in Kigali, Rwanda. FHI, TRAC, ITM, 2000. (Published in French)

STD therapy guide. FHI, PNLS, 2000. (Published in French)

STD/HIV/AIDS reference document. FHI, 2000. (Published in French)

Protocol: Pilot project to integrate tuberculosis and other opportunistic infections prophylaxis into voluntary HIV counseling and testing services in Rwanda. FHI, PNILT, 2001. (Published in French)

Baseline evaluation of IST care services in Kibuye health region. FHI, 2001. (Published in French)

Evaluation of the quality of STI care in the health regions: Byumba, Gitarama, Kibungo and Kigali. FHI, 2001. (Published in French)

Synthesis of basic information regarding sexually transmitted infections, HIV and AIDS. FHI, 2001. (Published in French)

Counselor's guide for HIV/AIDS and other sexually transmitted infections. FHI, 2001. (Published in French)

Protocol for the evaluation of care services for sexually transmitted infections. FHI, 2001. (Published in French)

Training module for preventive treatment of tuberculosis and bacterial infections amongst persons living with HIV. FHI, PNILT, 2001. (Published in French)

Evaluation of sexually transmitted infections (STI) care services in 2001 in the provinces of Byumba, Gitarama, Kibungo, Kigali-Ngali and the city of Kigali. FHI, 2002. (Published in French)

Intervention components for the prevention of mother to child transmission of HIV. FHI, 2002. (Published in French)

IST care algorithms. FHI, TRAC, WHO, 2002. (Published in French)

Directory of trained service providers for the syndromic approach to STI care. FHI, 2003. (Published in French)

Evaluation of care services for sexually transmitted infections: Kibuye Province, 2002. FHI, 2003. (Published in French)

Protocol for the evaluation of care services for sexually transmitted infections. FHI, 2003. (Published in French)

Tuberculosis and other opportunistic infections prophylaxis in voluntary HIV counseling and testing services in Rwanda: Pilot project results. FHI, 2003. (Published in French)

Trainers' guide for syndromic care of sexually transmitted infections. FHI, 2003. (Published in French)

Complementary information for the national guide on syndromic care of sexually transmitted infections. FHI, 2003. (Published in French)

Voluntary HIV counseling and testing

Basic information a client should know about HIV/AIDS (pamphlet). FHI, 2000. (Published in Kinyarwanda)

*Know about and prevent sexually transmitted infections (*pamphlet). FHI, 2000. (Published in Kinyarwanda)

Know about voluntary counseling and testing for HIV (pamphlet). FHI, 2000. (Published in Kinyarwanda)

National HIV/AIDS testing strategy. FHI, CNLS, 2002. (Published in French)

National HIV/AIDS voluntary counseling and testing directives. FHI, CNLS, 2002. (Published in French)

HIV/AIDS counseling trainer's guide. FHI, 2002. (Published in French)

Voluntary HIV counseling and testing counselor's manual. FHI, 2002. (Published in French)

Living positively with HIV/AIDS (pamphlet). FHI, 2003. (Published in Kinyarwanda)

How to take care of someone living with HIV at home: Volunteer's manual. FHI, 2004. (Published in Kinyarwanda)

Training of volunteers for home-based care for persons living with HIV: Trainer's manual. FHI, 2004. (Published in Kinyarwanda)

3. Overview of international and regional technical assistance

Date	Technical assistance provided	Name	Institution
January 1998	Work plan development	Gail Goodridge	FHI
April 1998	Development of capacity building strategy for Rwanda; program management; sub-agreement development	Wendy Githens Benazerga	FHI
March 1999	Preparations for gonococcal resistance study, including training of the supervisors	Yves Lafort	ITM
June 1999	Program review	Peter Lamptey	FHI
October 1999	Internal review of current activities	Peter Lamptey	FHI
October 1999	Internal review of current activities; work plan and budget development	Deborah Murray	FHI
November 1999	Evaluate results of STI case management capacity building activities; follow-up on gonococcal resistance study; development of next years STI control activities	Yves Lafort	ITM
January 2000	Surveillance activities	Jean Paul Tchupo	Independent consultant
February 2000	Assessment for potential VCT sites	Joan MacNeil	Independent consultant
April 2000	Sub-agreement development	Sylva Etian	FHI
May 2000	Development and planning of BCC activities	Carol Larivée	FHI
May 2000	VCT; BSS; PMTCT; TB	Claudes Kamenga	FHI
June 2000	Development of proposal for integration of TB and HIV activities	Ya Diul Mukadi	FHI
September 2000	Peer education guide development	Hally Mahler	FHI
October 2000	Clean and analyze data from the BSS Study; prepare draft report	Simon-Pierre Tegang	Independent consultant
November 2000	Sub-agreement development	Inge DeWulf	FHI
January 2001	Training of trainers (TOT) in VCT; planning of counselor trainings; follow-up supervision	Ouattara Awa Ramata	Independent consultant
January 2001	Program review; strategic development	Sheila Mitchell	FHI
February 2001	Input to PNILT and district hospitals in development of integrated TB/VCT pilot project	Ya Diul Mukadi	FHI
April 2001	Program management	Barbara Monahan	FHI
July 2001	M&E; MTCT at sites funded by Elizabeth Glaser Pediatric AIDS Foundation; VCT	Claudes Kamenga	FHI
September 2001	Development of youth BCC curriculum	Hally Mahler	FHI

Date	Technical assistance provided	Name	Institution
October 2001	Financial management	Ben R. N. Mbai	MSH
June 2002	VCT protocol development; VCT sub-agreement development	Jim Spilsbury	Independent consultant
October 2002	Site assessments for ART introduction; planning next steps related to ART introduction	Bart Ostyn	ITM
November 2002	Assessment of HIV/AIDS care and support services prior to introduction of ART program; development of implementation plan for ART program	Ya Diul Mukadi	FHI
January 2003	BCC sub-agreement development	Iain Mclellan	Independent consultant
February 2003	Develop comprehensive care course	Robert Colebunders	ITM
February 2003	Introduction of ART program	Leine Stuart	FHI
March 2003	BCC strategy development	Iain Mclellan	Independent consultant
May 2003	BCC strategy and materials development	Iain Mclellan	Independent consultant
July 2003	Sub-agreement development	Brian Pedersen	FHI
February 2004	Presentation of results from the TB/VCT integration pilot project	Ya Diul Mukadi	FHI
February 2004	Participate in PEPFAR Track 1.5 meetings organized by the USG (CDC and USAID)	Laura Kayser	FHI
February 2004	Assess ART Health Management Information System (HMIS) infrastructure to make recommendations for improving effectiveness	Dimitri Prybylski	FHI
February 2004	M&E planning and tools development	Saidou Hangadoumbo	FHI
February 2004	Sub-agreement development; PEPFAR work plan and budget development	Brian Pedersen	FHI
March 2004	Development of five-year National HIV/AIDS Prevention Plan	Ron Parlato	Independent consultant
April 2004	Sub-agreement development	Catherine Hastings	FHI
May 2004	Development of five-year National HIV/AIDS Prevention Plan	Ron Parlato	Independent consultant
July 2004	Development of five-year National HIV/AIDS Prevention Plan	Ron Parlato	Independent consultant

Date	Technical assistance provided	Name	Institution
September 2004	Development of five-year National HIV/AIDS Prevention Plan	Ron Parlato	Independent consultant
January 2005	Development National HIV/AIDS BCC implementation plan	Ron Parlato	Independent consultant
May 2005	Evaluation and supervision of ART programs	Maria Zolfo	ITM
January 2006	Care and treatment	Martin Ngabonziza	FHI
March 2006	Information technology	Olivia Patricio	
March 2006	Care and treatment	Martin Ngabonziza	FHI
April 2006	Documentation of project successes	Margaret Dadian	FHI
June 2006	Close-out and report writing; program management	Brian Pedersen	Independent consultant