Secure the Future (STF) was launched in 1999 as a US$100 million commitment from Bristol-Myers Squibb (BMS) to fund HIV/AIDS community outreach, education, medical research, and care projects in the five southern African countries: Namibia, Botswana, Lesotho, Swaziland, and South Africa. As of 2008, STF had grown to a grants budget of US$150 million (all administrative costs of the program were paid directly by the Bristol-Myers Squibb company) and was active in 12 African countries.

From the outset of activities, close consultation and collaboration with the government of each country led to the formation of partnerships to ensure that the projects were compatible with and complementary to the countries’ health-care policies and priorities. These partnerships were further solidified by the inclusion of Ministry of Health (MOH) representatives in independent Technical Advisory Committees, which were established to evaluate proposals submitted from community organizations, academic institutions, and health-care facilities and to advise STF on which proposals to consider for funding. For example, all ministries stipulated that the proposals selected for funding should be sensitive to the local context, ethically sound, innovative, sustainable, and replicable and have the potential to promote equity, but they also needed to be in line with each country’s national HIV/AIDS plan. Because the objectives of STF were often in alignment with those of the government, the partnership represented an opportunity for both parties to pursue their strategic objectives.

The public-private partnership model was not only applied at the government level, but also continued at the project level among grantees and their organizations. The strength of these organizations, namely, their knowledge of the situation on the ground, was enhanced by the skills and core competencies that a private organization such as BMS could bring to the table, such as good governance, financial and project management, and expertise in research and information technology.

STF initially funded individual organizations to conduct small- to medium-sized projects, usually with simple and discrete objectives. However, the real strength of these partnerships and the greatest promotion of equity are most visible in the work of the Community-Based Treatment Support (CBTS) program. This program was initiated by STF in 2003 in close collaboration with ministries of health, in order to target poor and disadvantaged populations living in settings with very limited resources.

**The STF Community-Based Treatment Support Program for People Living with HIV**

The CBTS model emphasizes that people living with HIV in resource-limited settings need both clinical services and community services to effectively enhance their quality of life and clinical outcomes. It employs supportive services such as food security and home-based care to help people manage their chronic HIV disease outside the clinic, in their homes and communities. The program leverages the strengths of government, the private sector, and community-based organizations to offer a true continuum of care, or as STF refers to it, "23½ hours" (the time outside the clinic) of disease management and psychosocial support that takes place in the patient's home and community following a "half hour" of medical care in the clinic.

The model is represented diagrammatically in Figure 1. The top diagram illustrates the three-way partnership between the public sector (government, local health authorities, and facilities), the private sector (STF, private physicians, traditional healers, and other private companies) and the community (nongovernmental organizations, community-based organizations, faith-based organizations), which STF established at each of its CBTS sites. The bottom diagram contrasts the service provided at the clinic with those delivered by community organizations.
Figure 1. The Community-Based Treatment Support Program model of care

ART = antiretroviral therapy; CBO = community-based organization; FBO = faith-based organization; IGA = income generating activities; NGO = nongovernmental organization; PLHIV = people living with HIV; PMTCT-plus = prevention of mother-to-child transmission plus family-based care and treatment; WHO = World Health Organization

The key to success in implementing this type of program is partnership, the dynamics of which will be examined in detail in this chapter.

Based on a three-year, five-site experience in southern Africa, STF has characterized and documented the implementation of the model according to seven steps, as follows:

- **Step 1:** Engage Government and Community
- **Step 2:** Establish Leadership and Management Structure
- **Step 3:** Adapt and Define CBTS Model
- **Step 4:** Build Partner Capacity and Infrastructure
- **Step 5:** Deliver Services
- **Step 6:** Monitor and Evaluate Implementation
- **Step 7:** Improve and Revise Services

These seven steps are cyclical in nature, following a sequence of planning, action, and reflection as illustrated in Figure 2.
The rest of this chapter describes how this model was put into practice through a public-private partnership to deliver much-needed treatment and care to a remote and poverty-stricken town in Botswana.

The Setting

Only a few years ago, Bobonong, in the sub-district of Bobirwa, (Figure 3) was a dying community, both figuratively and literally. The small town in eastern Botswana was ravaged by HIV/AIDS, poverty, unemployment, illiteracy, and hopelessness. The town is home to about 20,000 people and is the center of activity within the Bobirwa subdistrict, which has a total of 66,000 inhabitants. Unemployment in the subdistrict increased from nearly 25% in 2001 to 33% in 2003. The prevalence of HIV among pregnant women was close to 37.4% in 2003, making it one of the places in the world hardest hit by HIV.

![Bobonong, Botswana](image)

Figure 3. Bobonong, Botswana

The government of Botswana recognized the profound impact that HIV/AIDS was having on communities throughout the country, and began providing antiretroviral therapy (ART) to its citizens in January 2002 under the MASA program (a Setswana word meaning “new dawn”). Initially, the principal beneficiaries of MASA were the larger cities, such as Gaborone, Francistown, and Serowe. Isolated communities with scattered populations such as Bobonong were not earmarked to receive a clinic in the program at this early stage. Therefore, residents of the village had to travel approximately three hours each way to either Francistown or Serowe to access antiretroviral drugs (ARVs). As Gabaitse Marope, treasurer of the Ward AIDS Committee in Bobonong, described it, “Those who made the trip had to factor in the time and expense. This was not easy for people here; it was demoralizing.”

Engaging and Partnering with Government and Community

When STF started consulting with the government in 2003 regarding the relevance and acceptability of implementing a CBTS model in Botswana, the MOH representative on the STF Technical Advisory Committee championed the selection of Bobonong because of the presence of the Bobonong Home-Based Care Society (BHBCS), a dedicated community-based organization that had pioneered home-based care in the country. Negotiation with the MOH proceeded rapidly, in part because of the excellent relationship STF had been developing with the government of Botswana since 1999. This relationship started with the building of the country’s first HIV reference laboratory, which facilitated the roll-out of MASA, as well as the establishment of a state-of-the-art facility for treating children with HIV, the Botswana-Baylor Children’s Centre of Excellence. The national AIDS and STD Unit took the lead in engaging with intergovernmental, district, and local stakeholders to develop a proposal for Bobonong based on the STF model and adapted to the local context.

STF consultation with the government led to an appropriate sharing of roles and responsibilities between the public and private partners as follows:

- **The Ministry of Health and the Ministry of Local Government** provided ARVs and related drugs, supervised institutional coordination, and ensured that the monitoring and evaluation system met the national ARV guidelines. Focal persons were appointed by the two respective ministries to work closely with fund manager KPMG and the project team.

- **Bobonong Primary Hospital (BPH), representing the MOH**, provided ARVs, laboratory and radiology services, social work services, and dietetic services, and conducted operational research associated with the project. BPH, the only hospital in Bobonong and one of only two in the subdistrict, also housed the Project Secretariat and served as chair for the Project Management Committee.

- **Borotsi Clinic, representing the Ministry of Local Government**, also located in Bobonong, conducted community outreach activities, screened and referred patients to the hospital, provided psychosocial support and patient follow-up, and participated in the operational research of patients who did not require treatment after an HIV-positive diagnosis (based on a CD4 lymphocyte count above 200 cells/mm³ without any AIDS-defining illnesses).

- **The District Health Team**, under the guidance of the Ministry of Local Government, oversaw community outreach and education on all public-health programs and also served on the Project Management Committee.

- **Bobonong Community Home-Based Care Society (BHBCS), representing community-based organizations**, community mobilization and counseling, peer education and patient follow-up, income-generating activities, home-based care, psychosocial support, and food security services. The 70-member organization, formed in 1996, began with only 12 volunteers and is viewed as one of the best community-based organizations in southern Africa.

- **KPMG Management Services**, a private organization, is a fund management company that oversaw project activities using rigorous financial controls. KPMG was required to sign off on any expenses over 3,000 pula (approximately US$430 in 2006). According to John Botsewele, project manager, “We wanted to be certain that the funds were being used for their intended purpose.”

- **STF**, helped build the institutional capacity of the project by funding new facilities, equipment, and staff; conducting recruitment and training, and providing technical assistance. The core competencies of BMS were leveraged in order to build capacity in governance, project management, financial management, Good Clinical Practice (code of conduct underlying research involving human subjects), and monitoring and evaluation.
The existing national HIV/AIDS response structure was built into the CBTS program in the subdistrict, including voluntary counseling and testing (VCT), prevention of mother-to-child transmission, and orphan care services. The program was further aligned with the country’s National Strategic Framework for HIV/AIDS (2003-2009) that sought to increase access to care and support services by 50%, and usage of HIV/AIDS treatment and support services by 25%, by 2009.

In December 2003, the MOH signed a memorandum of understanding with BMS concerning the sustainability of the Bobirwa subdistrict ARV project. In essence, the ministry agreed to assume responsibility for the continuation of the program beyond the three years of funding provided by STF. As of January 2007, the government of Botswana has respected this clause of the agreement. This is a testimony to the strength of the partnership, a strength imparted by mutual respect and trust between the government and STF.

Engaging with local community-based organizations was relatively simple in Bobonong compared to some of the other STF CBTS sites, because of the strength of the partnering nongovernmental organization, the BHBCS. This group had established a solid home-based care practice in the subdistrict and was already providing services to a large number of clients. This was good for STF, but it was also good for the BHBCS, since it meant an infusion of funds, resources, and training. The partnership also resulted in the construction of new facilities to house BHBCS offices, providing space for activities such as staff training, patient support groups, and income-generating activities.

**Strengthening Partnerships through Leadership and Management**

The management structure that was developed (Figure 4) gave considerable responsibility to the project manager, who had direct authority over the implementing team and administrative authority (i.e., the District Health Team and the medical team at BPH). STF encouraged this structure and understood the advantage of identifying a strong project manager from the early stages of planning. After six months of searching, an exceptional project manager was recruited who galvanized the team and brought the project to a level of performance ultimately recognized by an award from STF.

**Partner Adaptation of the Model**

The partnership model is by nature generic and its adaptation to the local context is required. This process was simplified in Bobonong by the fact that the community component was entrusted to one organization, the BHBCS. Nonetheless, in addition to the HIV clinic established at BPH, the Borotsi Clinic and other satellite clinics in Mathathane, Semolale, and Tsetsebjwe would also provide services. As STF discovered for all the CBTS programs, the elaboration of a detailed patient flow is the starting point from which the program design should be developed. In keeping with the philosophy of partnership, this patient flow (Figure 5) was determined at a workshop attended by stakeholders from clinical, community, and government sectors.

---

**Figure 4. The Bobirwa ARV project management structure**

The structure reflects some key principles underlying the CBTS model: partnership, linkage, and interdependency between the various stakeholders.
The strong partnership with government, at both the MOH and district health levels, allowed for an approach that enabled satellite clinics to provide VCT, ongoing care of patients not yet requiring ARVs, and referral of more advanced cases to higher-level facilities. The relative advantages and disadvantages of decentralized service provision at different levels of health facilities are outlined in Table 1. It is important to note that regardless of whether a decentralized or centralized approach is chosen, the system and the patient flow only function well if the community members and community organizations are involved.

Table 1. Advantages and Disadvantages of Various Facility Types

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>District hospital</td>
<td>Can be dedicated solely to HIV/AIDS or jointly provide HIV/AIDS and other needed services (e.g., TB treatment, sexually transmitted infection treatment, family planning)</td>
<td>Can put patient at a greater risk of stigma, as he or she may be identified as being HIV-positive by observers</td>
</tr>
<tr>
<td></td>
<td>Usually located close to other critical hospital services, including inpatient care, surgical care, pharmacy, and laboratory services</td>
<td>Depending on geography, patients may have to travel long distances to site</td>
</tr>
<tr>
<td>General outpatient department</td>
<td>Normalizes HIV and thus can reduce associated stigma</td>
<td>Services not focused on HIV, personnel not specialized to treat people living with HIV</td>
</tr>
<tr>
<td>Primary health clinic linked to district hospital</td>
<td>Generally closer to patients’ homes, which minimizes transport challenges</td>
<td>Less comprehensive and specialized care</td>
</tr>
</tbody>
</table>

The community partner, BHBCS, decided that community education, mobilization, care, and support activities (including home-based care, psychosocial support, food security, and income-generating activities) should be developed. The patient flow diagram (Figure 5) indicates how referrals can occur from the clinic to the community and vice versa. Thus a patient could, for example, be referred from the clinic to BHBCS to receive home-based care and food security services. The same patient might be referred back to the clinic by a community health worker who finds that the patient has developed side effects to ART. In the event that the patient does not turn up for a scheduled clinic visit, the community health worker is alerted to go and trace the patient rapidly to avoid treatment interruption. This technique was instrumental in maintaining a very low treatment default rate of 5.2% in STF-sponsored CBTS programs.²

The project leaders also recognized early on the importance of partnering with traditional healers in the surrounding area. According to Dr. Kabengele of the HIV clinic at BPH, “People in our community have a strong belief in traditional healers. You cannot overlook them. We therefore...
needed to train them on HIV/AIDS issues." While recognizing that he and other traditional healers take a very different approach to HIV/AIDS than the health professionals at BPH and BHBCS, Ngwako Nkawana, a member of the traditional healer group Botswana Dingaka Association, said he was viewed as a member of the team from the outset: "Here people are appreciative of traditional healers and I have worked well with others in the program."

In this way, partnerships between public, private, and community sectors were clarified during the adaptation process. Once this step was completed, capacity building was needed before service delivery could begin.

**Training and Capacity Building**

Bringing diverse organizations together as implementing partners requires capacity building for clinical staff, private physicians and/or traditional healers, and community organizations, both prior to the launch and throughout the program's operation. In communities where ARVs have not previously been available, as was the case in Bobonong, training on many aspects of therapy and follow-up care is essential.

Training was coordinated by STF and provided to all partners according to their needs. It included HIV/AIDS education for all groups; training in governance, project management, and financial management for the program leaders; Good Clinical Practice for research-associated staff; and monitoring and evaluation for most staff. In keeping with the MOH mentorship program, the Children's Centre of Excellence in Gaborone (also funded by STF) provided ongoing clinical training on general HIV care and treatment with teams from the center visiting Bobonong on a monthly basis over a period of six months.

Capacity can also be enhanced by upgrading physical facilities. The partnership resulted in the creation of a new HIV clinic at the hospital, a dedicated HIV care facility at the Borotsi Clinic, and a new facility for the BHBCS. In addition, the full cadre of implementers was educated about the CBTS model so that they became acquainted with the principles of the program. This helped keep them motivated, as they were able to understand how their individual contributions fit within the broader continuum of patient care.

**Service Delivery**

The objectives of service delivery were defined as follows:

- To build and strengthen the institutional capacity of program partners for effective implementation of ART
- To mobilize, educate, and sensitize the community in general, and people living with HIV in particular, on ARVs and HIV/AIDS
- To provide ART at the project site, and improve accessibility, availability, and effective utilization of ARV services
- To improve food security at both the household and community levels
- To monitor and evaluate the implementation and impact of the project

The best way to demonstrate the effectiveness of service delivery is to show results. Monitoring and evaluating the program's progress is important to ensure that patients are receiving the services they need and program outcome goals are being achieved. With assistance from Family Health International (FHI), which was contracted by STF, the stakeholders established a monitoring and evaluation framework, data collection tools, and indicators, and trained personnel on data collection methods. This framework focused on the community component of the program, especially the link between community indicators and clinical outcomes. Clinical data were collected at BPH and the satellite clinics according to national requirements and according to an operational research protocol designed by STF.

**Program Outcomes**

In September 2006, the experience and data from Bobonong that had been collected since the beginning of 2004 were combined with those of the three other CBTS sites in southern Africa (Namibia, Lesotho, and South Africa). Overall, the results demonstrated the effectiveness of the CBTS model. Highlights of these results are as follows:

- Overall, the uptake of VCT increased approximately tenfold within two to three months from the start of community mobilization. By November 2006, more than 16,000 patients had been enrolled in CBTS sites in southern Africa. In Bobonong, over 3,500 had been enrolled by this date and of these, more than 1,500 were on ARVs—three times the number that had been forecast.
- An intent-to-treat analysis from the first 941 patients on ART for 12 months at the four sites showed an overall efficacy of 64%. Efficacy was defined as a sustainable increase in CD4 lymphocyte count of greater than 50 cells/mm$^3$. All deaths and discontinuations were considered failures. The data for Bobonong alone showed efficacy of 66%.
- At 12 months, 73% of patients were still more than 95% adherent. Adherence was defined as missing no more than one dose per month.
- This was assessed by correlating community indicators (from the FHI protocols) with clinical outcomes and was demonstrated in the following outcomes:
  - CD4 counts increased by significantly greater amounts ($P_{=.016}$) and reached significantly higher levels in patients on ARVs who accessed community support compared to those who did not—an increase in average CD4 count from 129 to 381 cells/mm$^3$ was seen in patients receiving community support compared to an increase from 126 to 330 cells/mm$^3$ in patients not receiving community support.
  - Patients satisfied with the level of community support they received also experienced better quality of life and adhered better to their ARV medication than those who were not satisfied.
  - Food security and home-based care were the two services statistically associated with better adherence.
  - The loss-to-follow-up rate in CBTS programs was only 5.1%, compared to 10% to 20% reported from other comparable ARV sites in South Africa.$^{3,4}$

Overall, it was shown that with community mobilization and support, a patient was more likely to present for testing and treatment, was better
The implementation of community support services to extend the support provided to patients into their communities. This was complemented by strong and clear linkages and referral systems between the clinic and community partners.

---

**diving in: the earliest days of the bristol-myers squibb secure the future program**

*Responding to HIV/AIDS on a scale commensurate with the epidemic is a global imperative. The task has barely begun, but at least we are at the end of the beginning, with the needs recognized together with the proven elements of an effective response.*

—Peter Piot et al

With the reauthorization of the President’s Emergency Plan for AIDS Relief (PEPFAR) by the United States Congress in April of 2008 at US$50 billion over five years and the Global Fund to Fight AIDS, Tuberculosis and Malaria having attracted $4.7 billion in financing through 2008, it is difficult to remember a time not that long ago when both the public and private sectors of the global community were not receiving significant financial resources to address the HIV/AIDS crisis in Africa. Yet large initiatives such as PEPFAR and the Global Fund did not in fact lead the way. Rather, it was nimble private philanthropic efforts, such as those led by Bristol-Myers Squibb (BMS) and others, that were the first to devote significant financial resources to international HIV/AIDS efforts.

By 1999, the AIDS pandemic had reached alarming proportions, and its impact was being experienced most severely by people living in sub-Saharan Africa. At that time, 16 million people had died of AIDS, 25.3 million were living with HIV, and 10 million children had become AIDS orphans in the region since the beginning of the pandemic. Yet in 1999 the global community was just beginning to wake up to the speed and scope of HIV transmission worldwide, the disparity between the treated and untreated, and the urgent need to begin taking action. The challenge was to adequately resource and coordinate these efforts while simultaneously addressing the social issues that fuel the spread of the disease.

As a global company and leading developer and manufacturer of antiretroviral treatments, BMS was acutely aware of the impact of the AIDS pandemic around the world. The company had been involved in the field of HIV medicine since 1985 when the virus was first discovered and efforts to develop treatments began. From that point on, HIV became a constant focus of the company. Ongoing interaction with researchers, clinicians, advocates, policymakers, people living with HIV, and the company’s own African business strengthened the understanding among senior management that the creation of a dedicated philanthropic program was the necessary, responsible, and right thing to do.

The company also recognized that philanthropy could provide an opportunity for leadership. BMS could combine its knowledge of HIV/AIDS with its independent and flexible philanthropic resources and be one of the first to step forward and seriously address a complex social issue.

In so doing, corporate philanthropy would help take the risks that individual governments and multilateral organizations could not, would not,
or were slow in undertaking. Encouragement to act boldly came from the secretary general of the United Nations, Kofi Annan, who personally approached the company’s CEO and asked BMS to take a leadership role in helping to fight the pandemic in Africa and to do so in an unprecedented way.

In May of 1999, BMS and the BMS Foundation (BMSF) announced a groundbreaking five-year US$100 million initiative called Secure the Future: Care and Support for Women and Children Affected by HIV/AIDS (STF). STF was the first major corporate philanthropic program to target the AIDS pandemic in Africa. The goal of the initiative was to identify and support innovative, cost-effective, sustainable, and replicable models to manage the impact of HIV/AIDS in resource-limited settings. Initially, the program focused on the five countries in southern Africa that had been hardest hit by the pandemic—Botswana, Lesotho, Namibia, South Africa, and Swaziland. In 2001, an additional commitment of US$15 million allowed the program to expand to four low-prevalence countries in West Africa—Mali, Côte d’Ivoire, Senegal, and Burkina Faso—and further commitments have enabled expansions to Uganda, Malawi, and Tanzania. To date, BMS has committed US$150 million under STF, which has been operating for nearly 10 years.

It is important to view the initial as well as subsequent financial commitments from BMS in the context of the limited public and private sector funds being targeted for HIV efforts in Africa in the late 1990s and the early 2000s. In 1998, international assistance funds made available for HIV/AIDS totaled $300 million. In July of 1999—two months after the announcement of STF—United States Agency for International Development (USAID) announced the Leadership Investment in Fighting an Epidemic (LIFE) initiative, which committed US$100 million to support projects in 13 focus countries. In September of 2000, the World Bank launched the Multicountry HIV/AIDS Program for Africa with commitments of US$500 million for a two-year phase of immediate funding and US$500 million for the second phase commencing in 2002. As late as at 2001, BMS was contributing more than some of the 22 wealthy donor countries of Europe’s Development Assistance Committee. As for private foundations, according to Funders Concerned About AIDS, in 1998, only US$7.3 million in grants—largely from the Bill & Melinda Gates Foundation—had been made by U.S.-based foundations to support AIDS programs outside the United States. Though the US$150 million contributed by BMS pale in comparison to the US$10 billion that economists have estimated is needed annually to reverse infection trends and treat the millions living with HIV, it was an unprecedented sum for a company like BMS and perhaps made even more significant by the fact that it came from a pharmaceutical company that was also in the throes of developing the proper business response to the pandemic.

The creation of STF helped to propel the medicines business to make certain that its contributions to defeat the AIDS pandemic were reflected in its business practices as well. For example, in May 2000, on the first anniversary of the establishment of STF, the company became a founding member of a new initiative by the United Nations and the research-based pharmaceutical industry to speed access to treatment. The Accelerating Access Initiative (AAI) is a collaborative program with nine research-based pharmaceutical companies, as well as UNAIDS, and four other United Nations agencies and governments, to facilitate the availability of antiretroviral medicines in countries that have clearly developed national AIDS strategies. The initiative helped lead to the availability of BMS HIV medications at significantly reduced pricing. In addition, by March of 2001, the company announced that it would make its two HIV medicines, Videx and Zerit, available in sub-Saharan Africa at even lower prices. At the same time, BMS announced that it would ensure that its patents did not prevent access to inexpensive HIV/AIDS therapies in sub-Saharan Africa. Through the years, other significant business actions would follow, including an agreement to help ensure sustainable access to treatment for millions of HIV-positive individuals in sub-Saharan Africa and India through a technology transfer of BMS’s newest antiretroviral, atazanavir, to two generic-drug companies, Aspen and Emcure.

Reference List


This work is licensed under a Creative Commons Attribution 3.0 License.