

Tanzania and Zambia: In-Country Coordination to Improve Diflucan® Access

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- The Diflucan® Partnership Program and Interchurch Medical Assistance, Inc. (DPP/I.M.A) increased in-country capacity to distribute, deliver and strengthen the drug management systems in Tanzania and Zambia.
- This program expanded coverage of drug availability and advanced the quality of care in two countries and can be replicated elsewhere.
- By comparing cross-country experience, in this case in health, the MfDR process gets reinforced and can evolve into a stronger program over time.
- The role of the private sector (as donor) is especially valuable in delivering effective medicine to patients and providing M&E systems need to track delivery, usage and non-leakages.

Introduction:

The Diflucan® Partnership Program (DPP) is a Pfizer Inc. initiative to make its antifungal medicine, Diflucan® (fluconazole), available free of charge for the treatment of *Cryptococcal Meningitis* (CM) and *Esophageal Candidiasis* (EC), two opportunistic infections associated with HIV/AIDS. Worldwide, as of summer 2006, the DPP had treated over 200,000 persons, launched programming in forty-six countries, and delivered five million tablets to help HIV patients live more comfortably. Given the magnitude of the global project, DPP programming has primarily called on health ministries and in-country applicants to order, receive, distribute and monitor the Diflucan®. Drug distribution and monitoring once Diflucan® arrives at port depend upon the in-country systems and thus limits

the potential reach of the DPP. Outcomes such as increased utilization reporting, improved country-wide product delivery, and expanded product access, which is systemic and extends geographically, have been a challenge. At the program design stage, the DPP planned implementation consistent with the first two Managing for Development Results (MfDR) principles: 1) focus the dialogue on results and 2) align programming, monitoring and evaluation with results. The DPP addresses the United Nations (UN) Millennium Development Goal Six to combat HIV/AIDS and Goal Eight to work through global partnerships for development.

Focus the dialogue on results: The DPP set out both a quantitative objective (to expand *coverage* of drug availability to additional hospitals) as well as a qualitative goal (to advance the *quality of care*). CM is dire if left untreated, and as relapse rates are as high as 50-60 percent,; maintenance therapy, such as Diflucan®, is required to prevent recurrence. EC contributes to malnutrition by causing severe pain and difficulty swallowing when eating, thereby contributing to advancement of HIV/AIDS and early death. In Tanzania, the DPP placed targets on institution enrollment and enrolled 60 people over two years. Interchurch Medical Assistance, Inc. (I.M.A.) trained staff on drug inventory management and proper prescribing to improve the *quality of care* of the HIV/AIDS patients. The DPP seeks to assure that Diflucan® is used for serious HIV-related conditions.

The second goal of the DPP is to strengthen drug management of national healthcare systems through trainings and supportive supervision. Specifically, the DPP endeavors to enhance the capacity of healthcare personnel to manage opportunistic infections (OIs) and to practice good program implementation (i.e., self-monitoring, reporting and rational drug management). The DPP also contributes directly to the following national objective: “strengthening the healthcare structure of Tanzania through expansion of healthcare personnel, facilities and equipment and

comprehensive training in the care and treatment of People Living with HIV/AIDS (PLWHA).”¹

Align programming, monitoring and evaluation with results:

Scale-up of the enrollment and preparation of new sites to receive products has been the first priority of the DPP/I.M.A.. Although the number of institutions is quantifiable, qualitatively, the metrics of proper prescribing and product management are more subjective. I.M.A. organized teams to go out in the field in Tanzania to do training. Open and frequent communication with the institutions has been necessary to track program progress. The country coordinators assumed the responsibility for monitoring the flow of the product within their catchment areas and reporting any diversions.

Regarding the secondary goal of strengthening drug management, the DPP/I.M.A. supplies:

- Capability of DPP partners and institutions to address supply chain system needs;
- Capacity to monitor and make recommendations to improve pharmaceutical practices which, although in the context of a specific program, have broader applicability; and
- Ability to deliver quality of care and treatment for PLWHA who suffer from OIs (the DPP/I.M.A. measures this target by tracking the percentage of recipient institutions reporting).

Application:

The I.M.A. Implementation Approach: The I.M.A approach to implementation focuses on partnership, in particular with Christian Health Association (CHA) missions abroad. The DPP/I.M.A. initiative has provided the technical and operational inputs for pharmaceutical support to ensure availability of Diflucan®. The

¹ Tanzania National Guideline for HIV/AIDS Care and Treatment. Tanzanian Ministry of Health: The National HIV/AIDS Care and Treatment Plan 2003-2008.

backstopping work by the Regional Pharmaceutical Manager has included information dissemination, preparation of applicants, and assistance in completion of the application forms. I.M.A. has also advised on logistical approaches such as whether hospitals should organize a pooled procurement system or a single uncoordinated procurement, or determining the requirements for instituting a pull system instead of a push system for product reordering.

The DPP/I.M.A. needed to adjust the implementation efforts to accommodate the differences between the drug distribution systems in the two countries. In Zambia, the Christian Health Association Zambia (CHAZ) has procured and distributed Diflucan® using its own supply system, and all Diflucan® received is stored in CHAZ warehouses and distributed to hospitals. In Tanzania, Diflucan® is distributed by the Medical Stores Department (MSD), the national government-run supply system. The Tanzanian national procurement system lacks some of the flexibility present in Zambia.

Monitoring and Reporting is Integral in the Systems of Both Countries:

Tanzania: In Tanzania, the National AIDS Control Program (NACP) coordinates all HIV/AIDS activities in the country, including DPP implementation. In order for the DPP/I.M.A. to effectively promote a results framework, the work had to be done in conjunction with the NACP using the following mechanisms:

1. Treatment Facility Applications: Institutions submit evidence of need to the NACP, who approves Diflucan® recipients.
2. Treatment Facility Reports: Hospitals are required to submit reports to the NACP on a quarterly basis. Based on these reports, the NACP (working with MSD and I.M.A) decides the quantity of Diflucan® to supply regularly to the points of care from central stocks.

3. National DPP Program Progress Report: For better performance and more frequent progress monitoring, the DPP has requested that the NACP to compile reports and requests every six months. This report, together with a duly filled shipping advice, is sent to the DPP program manager at Axios for initial review. After initial review, Axios sends its recommendations to senior Pfizer and I.M.A. reviewers for refinement and approval.
4. Multi-stage Product Delivery Reports: a) The NACP affirms receipt of the Airway Bill and communicates to MSD; b) MSD notifies the NACP of product location after it clears the consignment with a tax exemption and places the product in its storage depots countrywide; and c) hospitals and local MSD depots notify the NACP when the institutions pick up their designated allotments from the depot.

The NACP reporting framework has some distinct advantages. The system is centralized and gives an overall country perspective if all inputs are timely. Moreover, the stakeholders, i.e. the institutions, DPP partners, NACP and MSD, all work together to achieve the same objective. The centralized nature of this program makes for easy linkages between the DPP and other programs such as antiretroviral therapy (ART) roll-out and treatment of opportunistic infections (OIs).

DPP/I.M.A. activities in Tanzania have reinforced the four steps in the process described above:

1. On-site training of over five hundred hospital staff in DPP management has helped double the countrywide number of DPP trained personnel over an eighteen month period.
2. On-site mentoring and ongoing availability has improved the number and the quality of the treatment facility

reports. On-site support has also allowed for the redistribution of Diflucan® from slow consuming facilities; for example, in one year, over 40,000 tablets in facilities and at risk for expiration were redistributed.

3. I.M.A. personnel have facilitated the preparation for the national DPP reports by consolidating reports from faith-based facilities, participating in the report writing and arranging for monitoring by the national OIs steering committee that oversees the project.
4. I.M.A. has organized meetings to bring together the various supply system stakeholders that form the national ART logistics system to discuss and propose ways to improve.

Zambia: In Zambia, CHAZ has established a supply system for essential commodities supported by various partners such as the Global Fund for AIDS, TB and Malaria (GFATM). As a means of bolstering this system and assuring Diflucan® access for mission hospitals disassociated from the existing public system, the DPP/I.M.A. worked with CHAZ to develop a simple, straight-forward supply mechanism, guided by the hospital consumption reports, to form a basis for acquisition of new supplies from CHAZ.

Diflucan® has been delivered to a) public hospitals through the government's own Central Medical Store of Zambia, and b) affiliates of CHAZ for all hospitals that are under the CHAZ umbrella. However, the two DPP/I.M.A. programs are not linked. Given this division of responsibility and the Ministry of Health's (MOH's) desire to administer its own system, the coordination efforts of the DPP/I.M.A. have focused exclusively on CHAZ institutions. The four basic monitoring stages in the results framework are similar to Tanzania's approach; however, a few differences in the Zambian program are noticeable:

1. Treatment Facility Applications: New applications go directly to CHAZ for approval.
2. Treatment Facility Reports: Monthly progress reports are submitted to CHAZ for review.
3. CHAZ DPP/I.M.A. Program Progress Report: Instead of integrating its information into an overarching national report, updates and restocking requests are sent directly to Axios.
4. Multi-stage Product Delivery Reports: Communication regarding product location in-country occurs strictly between CHAZ and its member hospitals.

CHAZ, having independent decision-making authority, can move forward with implementation at its own pace without waiting for the government's report to be published. CHAZ also has flexibility and a quick response time. The ability to determine program policies, such as a “no report no product” rule for facilities, establishes accountability. To ensure the product delivery is smooth, timely and efficient, the DPP/I.M.A. and CHAZ have devised a centralized procurement model through which hospitals receive training, technical support and access to Diflucan®.

Problem Solving:

Tanzania: The multiple players within the Tanzanian system are presented with ongoing challenges. Delays have resulted because facilities cannot go directly to the Diflucan® distributors for resupply. Instead, the NACP must establish the quantities to be dispersed to the facilities. To mitigate this logistical challenge, the DPP/I.M.A. has proposed a new plan whereby hospitals submit reports to MSD instead of the NACP or I.M.A.

Given that the NACP is overburdened by national HIV/AIDS demands, it lacks the staff to process Diflucan® reports originating

from the non-MOH institutions. Recognizing these challenges, the DPP/I.M.A. approached the NACP to offer assistance in the implementation of the national program. As a result, the DPP/I.M.A. has been tasked with coordinating all of the DPP implementation activities for mission hospitals. The activity of the I.M.A. country coordinator is officially supervised by the NACP, which also receives the coordinator's quarterly reports. The DPP/I.M.A. has instituted monthly reports from the mission hospitals, an approach that is more effective because even hospitals that fail to report for one month have the ability to submit a report the next month, which ultimately will be consolidated in the quarterly report.

I.M.A.'s role is to provide support in advising hospitals on ordering procedures since the reorder process is coupled with previous consumption reporting. Currently, hospitals simply submit their requirements to MSD. This process is perceived as having a negative impact on the project because hospitals receive Diflucan® whether or not they provide reports. I.M.A. has advised hospitals and MSD on the reordering process. Progress was evident when the NACP, I.M.A. and MSD met to lay down the "standard of practice" for Diflucan® supply management in July 2006.

Zambia: Unlike Tanzania, DPP expansion in Zambia has succeeded more readily because CHAZ has program ownership and serves as the sole coordinator of the DPP for the facilities under its management. Pharmacy management at the facility level is often carried out by staff without formal training and is an obstacle faced by the Zambian program. Thus the DPP/I.M.A. has focused on improving standard good pharmacy practice. Detailed and vigilant monitoring of product arrival and utilization has been stressed. In addition, inventory management training has been integrated into ART training given at CHAZ facilities.

Results:**Table 1: Summary of ten month achievements under I.M.A supported the DPP in Tanzania and Zambia**

	Tanzania	Zambia	Total
Number of hospitals enrolled	33	28	61
Number of hospitals receiving Diflucan®	30	24	54
Number of hospital staffs trained	558	28	586
Number of OC treated	1,602	1534	3,136
Number of CM cases treated	248	454	702

In both programs, the principle target was to increase the number of facilities receiving Diflucan®. Fifty-four institutions currently are receiving medicine due to the program's efforts.

The secondary goal was to strengthen the drug management system. In Zambia, the DPP/I.M.A successfully reached 100 percent reporting for CHAZ facilities as a result of the clear “no report no Diflucan®” policy. CHAZ is also responsible for warehouse and distribution inventories, giving it control over the supply for non-compliant facilities. In Tanzania, inadequately trained staff, poor infrastructure and negligence have contributed to poor reporting. Even with these challenges, I.M.A. has successfully managed to keep updated records (updated reports from 28 out of 32 hospitals (87.5 percent) have been obtained). Contributing to the difficulties in reaching 100 percent reporting is the fact that the faith-based network does not stock or distribute independently. Diflucan® supply management in Tanzania needs a thorough review to establish a user-friendly supply and reporting system to encourage collective participation in improving Diflucan® access. To address this issue, I.M.A began writing standard operating procedures for hospitals and MSD product distribution in Tanzania.

Conclusion:

Over three thousand patients have benefited from the DPP in Zambia and Tanzania alone. Working with different country dynamics and different approaches resulted in several lessons:

1. At all program phases, focus the results dialogue on integration with national systems, development agencies and other stakeholders. Partnership and dialogues are key factors in improving development projects. Working with the national system may be difficult at the start, but it has more impact and longer-term effects. This approach has shown promise as the DPP reporting and request process is more efficient and training is part of the national curriculum.

2. Align actual programming, monitoring and evaluation activities with expected results. Both in Zambia and Tanzania, the DPP/I.M.A. quickly learned that human capacity was the biggest challenge from the national coordinating level down to the facility level. Each step of DPP implementation has faced shortages or a lack of qualified staff for good supply management and clinical care for PLWHA. Given the critical connection between human resources and achieving results, the DPP's programming targeted human capacity development. The intensity and frequency of supportive supervision has been effective in bolstering the skills of staff working with mission hospitals, often in remote and underprivileged areas.

3. Keep the results reporting system simple and user-friendly. In both countries, management through an ongoing assistance model achieved positive outputs beyond those expected. Although traveling from site to site involved increased effort from DPP staff, these visits permitted the training of a larger number of hospital staff and witnessing of hands-on job demonstrations. Working with the pharmacy technicians at the institutions

permitted direct feedback on how to keep the reporting system user-friendly.

4. *Manage for, not by, results through arranging resources to achieve outcomes.* In-country dynamics (leadership, management, set-up, teams and partners) play a key role in development and program implementation. A persistent focus on results, expanded coverage and improved quality allowed for work in Tanzania to maintain a long-term vision even though the short-term results were slow to appear. The DPP/I.M.A. recognized the need to shift efforts toward greater involvement with the MOH. However, efficiency in Zambia was increased by having the operational monitoring activities under one unit of the partnership.

5. *Use results information for management learning, decision-making, reporting and accountability.* Examination of the achievement of suboptimal results will give management the opportunity to improve the overall system. Key factors such as workforce shortages, insufficient capacity and inefficient processes are correctable. When program management demonstrates the ability to make work easier for institutional and national partners, the program gains credibility and partners sense that all are working together for a common goal.