



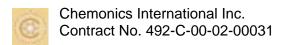
PHILIPPINE TUBERCULOSIS INITIATIVES FOR THE PRIVATE SECTOR PROJECT (PHILIPPINE TIPS)

DISCOURAGING TB SELF-MEDICATION – PHILIPPINE DRUG STORES AS PRIVATE SECTOR PARTNERS

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PREFACE¹

The Philippines ranked ^{8th} in 2002 among countries with the highest burden of Tuberculosis. In recognition of the gravity of the problem, the Philippine government adopted the DOTS (Directly Observed Therapy Short course strategy) strategy in 1996, resulting in a close to a 100% adoption of DOTS in the public health system. But despite its vigilance, the government has achieved only limited success in controlling the spread of TB. Over the last decade, TB has remained in the top 10 causes of both mortality and morbidity in the country. In a recent TB policy review conducted, it was determined that in order to control TB in the country, the private sector needs to be actively involved.

In line with the goal of reducing TB prevalence in the country through increased private sector involvement, the Philippine Tuberculosis Initiative for the Private Sector (Philippine TIPS) was organized in October 2002, funded by the American people through the US Agency for International Development. The goal of Philippine TIPS is to contribute to national efforts to control TB by "strengthening private sector participation in TB DOTS service delivery".

In the Philippines, as much as 85% of people who seek TB treatment in the private sector directly approach drugstores for their therapeutic needs. For the 24% of TB symptomatics who self-medicate, the drugstore is among their first points of contact for TB information and drugs. Thus, through a PHARMACY DOTS INITIATIVE (PDI) project designed by Philippine TIPS, pharmacies are being engaged as private sector stakeholders to promote DOTS. Pharmacy personnel are trained to discourage the practice of TB self-medication, support the "no prescription no dispensing of TB drug" policy of government and carry out referrals of drugstore clients with clear TB-related symptoms to DOTS centers. This initiative also aimed to increase knowledge of pharmacy clients about DOTS and improve case detection through a referral system established with the DOTS centers.

The Pharmacy DOTS Project Implementation

The project first launched a strong program of advocacy and networking with major stakeholders. This phase of the project consisted of message crafting exercises and IEC development, public lectures and workshops, one-one one meetings with stakeholders. Stakeholders come from the pharmacy associations, drugstore owners associations, including large national pharmacy chains, the Department of Health, the Bureau of Food and Drug, local TB coalitions, local government health officials and other national and local TB stakeholders.

Armed with strong endorsements from both the public health groups, and pharmacy groups, the project began a series of two-day training workshops for pharmacy personnel in seven pilot cities throughout the country. A total of 1,170 pharmacy personnel were trained in PDI with 25 pharmacies in each of the seven pilot cities signing a memo of understanding with Philippine TIPS to participate in the project. (Show Map of Philippines)

The PDI project through its training program taught pharmacy personnel to give information and distribute IEC materials to clients who come to the drugstores asking for TB drugs, with and without prescription. They are encouraged not to dispense TB drugs without prescription and discourage the practice of self-medication in the messages they convey to their clients. They are taught to pre-screen clients to determine if they are eligible or not for referral to DOTS units in the area closest to them. The client is asked if (s) he holds a prescription or not. If not, (s) he is entered in the client list, and the

¹ The Preface is based on a paper delivered at the North American Region conference of the International Union Against Tuberculosis and Lung Disease, February 25, 2005.

pharmacy personnel is made to understand that her/his action is NOT to give drugs. A series of information giving, pre-screening and ultimately referral will be offered to the client. If the client holds a valid prescription, s/he is then asked if s/he is aware that it is a TB drug that she is buying, and the procedure used for the diagnosis. Symptoms are asked, and for whom the drugs are intended to determine if they are the patients themselves or simply buying for someone else. For clients with prescription and buying only a portion of the TB drug prescribed, pharmacists are encouraged to offer adherence monitoring or even suggest to clients to go to the DOTS center if they think they are unable to buy the whole course of the TB medication. Adherence monitoring involves offering to follow-up the patient by phone to remind them when the medicines that they bought need to be refilled. This way, they address the problem of interruption of treatment. Cough of more than two weeks is an indication for the pharmacy personnel to issue a referral form to the client to a particular DOTS center if s/he agrees to be referred.

RESULTS

PDI Contributions to TB Case Identification

Philippine TIPS has succeeded in establishing partnerships with 170 drugstores in the seven pilot sites, including drugstores from the four biggest pharmacy chains in the country. It was able to institutionalize the pharmacy as a routine referral agency in the DOTS centers. Both public and public private mix DOTS units have agreed to include the pharmacy as a source of referrals, and added it in he regular forms under the "sources of referrals" of their symptomatics master list. The regional offices of the Department of health issued executive orders in support of the PDI, including the Bureau of Food and Drug's re-issuance of a memo to all pharmacies reiterating the "no prescription no dispensing" policy for TB drugs. A national declaration of support was signed with the Philippine Pharmaceutical Association, the Drug Store Association of the Philippines, Department of Health, and the Philippine Coalition Against Tuberculosis. (Show the memos and declarations)

A project management team consisting of a site manager and a field worker was organized by Philippine TIPS to oversee internal project monitoring and on-site coaching of pharmacy personnel. At the end of six months of implementation, PDI was able to record a total of 3,979 TB transactions, 39% (1, 550) of which were referred to DOTS facilities. Only 37% (575) of those referred actually went for consultations at the DOTS centers specified in the referral forms, of which a majority (79%) accessed the public DOTS centers. A significant percent (84%) of PDI referred clients who accessed the DOTS centers ended up in the TB symptomatic master list of the DOTS center, a result that can be explained by both the quality of PDI pre-screening and the seriousness of symptoms felt by those who sought help at the health centers.

Close to thirty percent (169) of PDI referrals that accessed the DOTS centers were diagnosed to be pulmonary TB cases, and 49 % (83) were found to be smear + cases. Pulmonary TB cases in the DOTS units that came as referrals from the PDI pharmacies comprised over 11% (169/1485) of the total diagnosed pulmonary TB cases in the PDI localities within July to November, 2004. The 2003 estimated total population in the seven sites is 6,437,071.

A mystery client study subsequently conducted show that pharmacies under the PDI have demonstrated significantly higher adherence to the no prescription no TB drug policy, were more knowledgeable about TB DOTS, and were more likely to give information to clients with regard to TB and the source of proper treatment, compared to a group of matched non-participating pharmacies. There was however a strong tendency to dispense TB drugs, even on a per piece basis

CONCLUSIONS

Initial results show that drugstores can be effective disseminators of TB-DOTS information and can be partners for increasing TB detection rates through pre-screening of TB symptomatics. Considering the limited PDI pilot sites, and the small number of pharmacies involved (170 in all), PDI was able to assist in the identification of 169 TB cases in six months, of which 83 were smear +. This level of PDI performance compare very well, if not better, with the performance of PPM DOTS units, at least as far as helping to identify TB cases.

Due to the recognition of the potentials of the PDI to enhance the performance of newly installed DOTS centers, plans are now underway for Public-Private Mix DOTS (PPMDs) to adopt the PDI as a strategy for increasing caseloads and improving their clinic performance. PDI's work has been hailed by the Philippine Pharmaceutical Association as innovative involving the pharmacist in the cause for the alleviation of TB in the country. At this writing, the PDI modules are being modified to suit the needs of the Deans Pharmacy schools throughout the country to include a module on TB in their curriculum. Furthermore, TB has been identified as one of two topics (the other is maternal health) for 2004 to be included in the continuing education course for practicing pharmacists being sponsored by the Philippine Pharmaceutical Association. Philippine TIPS has been engaged to provide technical assistance on this endeavor, through the PDI project. In addition plans are underway for saturating the pilot sites by way of involving all pharmacies interested to participate as well as expanding the project to the 20 sites covered by Philippine TIPS in the next two years.

In the long-term, an issue facing the project is the question of sustainability. There is a need to identify an appropriate a steward for the initiative as soon as the project ends in the next few years. This is a challenge that will have to be addressed by Philippine TIPS and its partners, as well as all TB stakeholders who are committed to reduce TB prevalence in the Philippines.

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I. PHARMACY-BASED TB DOTS IMPLEMENTATION PLAN²

A. Background

The public health risk associated with the re-emergence of tuberculosis (TB) is serious. Philippines now ranks seven among the 22 high burden countries in the world. According to the 1997 prevalence survey conducted in the Philippines, 63 percent of the population was infected with TB and the annual risk of infection is about 2.3 percent. Incidence is highest among the poor and the economically productive years of 15-55. In the year 2000, there were a total of 128,500 registered cases of TB in the Philippines and the rate is increasing at an alarming pace.

Despite numerous initiatives in the public sector, the 1997 prevalence survey found very slight decline overall. Many are not using DOH services, and fifty percent of symptomatics never sought services. A large number of this are self-medicating and are not completing the full short-course therapy.

NTP faces a number of challenges in their efforts to control the spread of this disease. These include effective case detection; provider knowledge on diagnostics and treatment; patient compliance uninterrupted drug supplies, alternative financing schemes and conducive policy environment. Patient compliance is critical to treatment and the control of TB in general. Incomplete treatment often results in multiple-drug resistant (MDR) tuberculosis. And the treatment of MDR tuberculosis is not only longer but much more expensive. Many developing countries do not have the resources to support such therapies.

DOTS (Directly ObservedTreatment, Short Course) provides an effective, low-cost alternative to the varied treatment plans used in a number of countries. The advocacy and implementation of DOTS programs on a global level are the best-known strategies for preventing the spread of TB and curing those who are infected. However, not all providers are familiar with TB DOTS.

The World Health Organization (WHO) reports that a significant proportion of TB cases are detected and treated by private health care providers. Private providers comprise for-profit health care givers, pharmacies, clinics, hospitals, NGOs and traditional healers outside of the formal public sector.

In 1997, the National Tuberculosis Prevalence (NTPS) showed some unsettling patterns of the health seeking behavior among the TB afflicted population. It is estimated that thirty eight percent of this group initially went to see a medical doctor, either in a public hospital, private hospital, public health center, or private clinic. Disturbingly, a third (34.5%) of this group chose not to seek any form of treatment. And, a fourth (27.5%) of the same population resorted to self-treatment³.

Integrated Medical Service (IMS) reports that a high percentage (85%) of those who seek TB treatment in the private sector go straight to pharmacies for their drug need. It is generally perceived that financial constraint and cost savings are the dominant reasons why clients by-pass medical providers⁴. While these are legitimate reasons, by-passing medical providers is a harmful practice that severely affects treatment outcome.

² Prepared by Isagani M. Perla for the Philippine TIPS project. Released August 2003.

³ Refer to Annex 12 Observed TB Treatment Provider of Choice

⁴ Some of the important reasons given by patients include: (i) distance from household to clinics and the wide access and convenience pharmacy provides to patients; (ii) expeditious attention given to clients and the quick relief from the medication provided; iii) availability of wide range of medication that are affordable to patients and/or the availability of credit or the option to purchase drugs in small amounts. Most important is the option to purchase drugs with or without prescriptions.

1) Current Situation and Role of Private Providers

Because TB patients increasingly seek private providers for treatment, their services need to be examined and brought up to standard. While private providers are generally perceived for higher quality services, many still have limited understanding of TB DOTS and are inadequate in diagnosing and providing proper TB case management. But their ability to provide convenience and privacy attracts patients who are stigmatized by the disease⁵.

The pharmacy, as the first point of contact for the self-medicating TB client has a strategic role in reaching these clients and providing them with correct information, appropriate drugs, referrals and counseling.

However, the drug dispensing practices of pharmacies are not well regulated and pharmacies routinely sell TB drugs without prescription. The recently concluded investigation of 168 drugstores validated that: i) limited TB information are provided to clients, counseling and/or referrals are not routinely given, and, ii) incomplete dosage regimen are routinely given to TB patients. Private providers, on the other hand, do not maintain accurate client records that can facilitate monitoring and follow-up. These practices are not only detrimental but exacerbate the already low detection rate and cure rates among clients dependent on private sector services. The current MDR TB problem as a result of the indiscriminate sale and use of antibiotics particularly sales of incomplete dosage regimen is a growing health problem.

2) Private Sector and the National TB Control Program

For the national TB control program to succeed, the private sector, particularly the pharmacies need to be involved in TB control efforts. Strategies that can attract, motivate and sustain these front-line health care givers to accept and support the TB DOTS program should be developed.

B. Rationale for Pharmacy involvement

There are many reasons why pharmacy involvement in TB control efforts is needed.

• Pharmacies are numerous, widely dispersed and strategically located.

Pharmacies are numerous, widely dispersed and strategically located and thus, will be able to provide wide access and convenience to clients seeking TB information or medication. There are 7,000 registered drugstores in the Philippines (AC Nielsen) strategically located in key urban centers and high traffic areas. It is estimated that there are even more unregistered drug sellers who continue to serve a large number of clients. The large number of drugstores and their strategic location provide an outstanding advantage that needed to be tapped for a number of reasons.

These medical service front liners are best poised to:

- provide TB clients wide access and convenience in serving their information needs, counseling, referrals and drugs.
- reach self-medicating TB symptomatics with correct information, counseling and referrals
- provide TB pre-screening by catching TB suspects inquiring about TB information or drugs for TB.

⁵ The 1997 National TB Prevalence Survey indicates that 12.7% of TB symptomatics go to private MD and private hospital while 25.3% seek public hospitals and health centers.

The role of drugstores particularly among self-medicating TB client cannot be ignored. This role becomes even more important as an increasing number of clients continue to seek medication from drugstores without prescription⁶

• Pharmacies are usually the first point of contact for information on drugs and health concerns.

The unique role of pharmacies as the first point of contact for information on TB drugs and health concerns provides a powerful advantage in increasing TB detection rate. The currently recommended approach to TB case finding involves detecting cases among people presenting with symptoms (most important is chronic cough) to the public or private health services. However, finding TB suspect will be difficult if the symptomatic chose not to visit the health providers. Pharmacies can catch these TB symptomatics who come forward to ask for TB information or medication.

• Pharmacist are trusted by clients and often fulfill client needs for privacy convenience, medical advice and quality of services

Pharmacists are trusted by clients and often fulfill client needs for privacy, convenience and quality of services. Many studies indicate that client reasons for choosing drugstores over public facilities is their perception of better quality and wider choices of drugs. As long as clients maintain this perception, pharmacies will continue to attract clients.

Pharmacies can expand the network of service delivery points.

Pharmacies as formal delivery points for health information have not yet been developed. Building this infrastructure will not only provide a powerful advantage in reaching inaccessible audiences particularly self medicating clients but also provide the foundation for future collaborations.

C. Challenge for drugstore involvement in TB control

Inappropriate antibiotic use is one of the major problems that has been strongly correlated with the unregulated dispensing practices of drugstores and drug sellers. Drugstores are not the only ones at fault – indiscriminate prescriptions of physicians, government health centers and pharmaceutical companies have also added to the problem. But the loose dispensing practices among drugstores certainly do not help the problem.

Some of the reasons for this practice include: i) clients' limited funds to afford full treatment, ii) the cultural concept of discontinuation of antibiotics upon relief of symptoms, and, iii) the client's need to allocate resources to other forms of treatment. These factors curtail the patient's ability to purchase the full course leading to incomplete treatment, a practice that many pharmacists often condone. Pharmacists also often act as medical advisers for clients shopping for affordable medication. Because they are not trained the kind of advice they can provide is limited and often inaccurate.

The Philippines has one of the highest percentages of antibiotic utilization among Asian countries surveyed. While an uninformed pharmacist may definitely add to the problem, an enlightened one can guide clients and discourage the harmful practice of selling drugs without prescription.

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⁶ In a separate study of 40 pharmacies in Metro Manila, 78% of these pharmacies did not require prescription for dispensing anti TB drugs. (Romulo, et. al)

Several attempts have been made in the past to involve pharmacies in the dissemination of health information and sale of health products. This includes the following: i) promotion of family planning methods particularly oral pills and condoms; ii) promotion of ORT; iii) promotion of STD syndromic management; and, iv) promotion of ECP (Emergency Contraception Pills). In most of these programs, drugstores involvement in the promotion of the products, while advantageous to the goals of the project, have also resulted to increased sales and profitability of the pharmacy⁷.

The level of involvement of pharmacies in TB control however, will be slightly different. It will entail a deeper commitment on the part of the pharmacy owners and staff.

D. Motivation of Drugstores to participate in TB DOTS.

These observations were gathered from the recently concluded survey of 168 pharmacies in the seven urban areas in the country.

- **Community Service**. Pharmacists generally feel that their involvement in community or social development projects like this elevates their profession and provides them a sense of fulfillment for community service.
- **Increased profitability**. It is expected that pharmacy clients under this program will purchase the required six months treatment regimen and thus will contribute to the profitability of the pharmacy.
- **Training.** Staff training provides an effective incentive for involvement. They appreciate refresher training and opportunity for skills upgrading.
- **Recognition** from government officials for their involvement is an intrinsic reward that many pharmacists value.
- Management fee. Both partner NGOs and pharmacies efforts in the implementation of activities will be compensated. It is customary to provide management fee or cost reimbursements to project implementers. A small management fee will be negotiated during the development of the MOUs and will serve as added incentive for performance.

E. Strategies for Pharmacy involvement in TB control efforts

Multiple approaches and strategies are examined and proposed to attract pharmacy participation in TB control efforts. It is anticipated that one or more models of collaboration may be used in the implementation of the strategy.

1) Description of Strategy

The ideal approach will depend largely from what drugstore owners and staff are willing to provide and the kinds of incentives that will appeal to them.

Many pharmacists have already indicated their willingness to provide information, counseling and referrals to TB clients. What is not clear is whether they will be able to perform this role continuously for an extended period. And, whether there is an ability to sustain the provision of incentives for them to perform these tasks.

Three strategies will be piloted in the seven demonstration sites to find the right combination that will be most effective. Innovative approaches to guarantee continued drug supply for private sector

⁷ Please refer to Annex 1 – Review of Best Practices in the Use of Pharmacies in the Philippines

patients will also be tested to see whether they will improve continuity of drug supply, patient compliance and improve treatment outcomes. These approaches are:

- The use of credit/discount card for TB drugs
- The acceptability/affordability of socially marketed TB drugs to patients
- The effect of "adopt a TB patient" strategy in treatment outcomes.

It is recognized that there is no single strategy that will be uniformly acceptable to all drugstores. Each drugstore will be attracted and will respond to a strategy that best serves its interests. Providing multiple strategies will provide the drugstore the option to choose.

The various models or approaches for pharmacy involvement may be categorized as follows:

• Model I (Information Dissemination)

Under this model, drugstores will be requested to disseminate IEC materials⁸ to walk-in TB clients asking for either TB information or drugs. While this is a more passive approach, it is still a very important service in creating awareness, advocacy and dissemination of critical information to TB suspects.

Engaging drugstore to undertake this role will need: i) discussion with owners to solicit their cooperation to assist in information dissemination; ii) letter of request and or recognition from DOH for their participation; and iii) attendance in a general workshop to orient them on the goals of the project and the need for their cooperation; and, iv) a request for their cooperation with trade audit efforts to measure dissemination and reach of IEC materials provided. While this may not require a separate MOU between the drugstore and the project, drugstore concurrence as participant in the project would be essential.

It will be to the best interest of the project to engage as many drugstores as possible in this information campaign. It is essential however, that the dissemination of information is closely monitored to ensure that the information reaches its intended audience and the level of penetration is measured.

• Model II (Pre-screening, IEC, Counseling and Referrals)

This model will require active participation and additional effort from the participating drugstore. They will be expected to perform TB pre-screening, the dissemination of TB information, client counseling and referrals. This will be the preferred model and will be strongly emphasized in soliciting participation. It is hoped that most of the pharmacies will fall under this partnership arrangement.

Strong emphasis will be made on client counseling and referrals because these are the two crucial activities that will ensure that the clients' information needs are adequately addressed and drugstores become stakeholders in the TB control efforts. The following incentives will be provided to attract participation. Training will be provided to drugstore staff to upgrade knowledge on TB particularly TB DOTS. In the past, training has been an effective incentive for participation. Pharmacists value any opportunity to upgrade skills. They also welcome the opportunity to expand their role to include client counseling.

⁸ IEC materials for dissemination by drugstores include: TB brochure, flyers, posters, mobiles, store stickers and other appropriate below the line print media that can help in providing TB clients correct information on TB.

Training provided to drugstores under this model will include: General TB Information, TB Case Management, TB DOTS and Client counseling.

An MOU between the project and the drugstore will be established to make the relationship binding. The recently concluded baseline study validated that majority of drugstores approached are willing to provide counseling to TB clients.

• Model III (Drugstore as an integral part of TB DOTS Center)

Plans are underway to set-up private sector TB DOTS center in the seven urban centers that will provide diagnostic (microscopy), treatment and drug supplies to TB clients. It is however anticipated that the number of TB DOTS centers will be limited and will not be able to provide wide access and convenience to private sector clients. Pharmacies close to the TB DOTS centers would be ideal collaborators in providing information and referrals to clients coming to them.

Under this model, pharmacies will be recruited to become an integral part of the TB DOTS center as the provider of information, referrals and counseling. Pharmacies will be more engaged in the services of the TB DOTS center. Please refer to Fig. 9. .

While this may be the most attractive strategy to pursue, it would require a higher level of commitment. Drugstores that are owned and operated as an extension of a private medical clinic or hospital would be ideal partners under this strategy

Under this set-up, it will be essential to ensure that proper regulatory controls are observed prior to accreditation of the TB DOTS center to include pharmacies as both information and drug supply points. It is also important that the services of the center are well regulated according to established NTP guidelines. The development of this model should be done in close coordination with the development of the planned fully accredited TB DOTS center in the identified replication sites.

While these three models appear most viable to provide the basis for the pilot implementation, it is envisioned that there will be many variations that would happen as more experience is gained in the course of implementation.

2) Innovative approaches for ensuring uninterrupted TB drug supplies for private sector TB clients.

Uninterrupted drug supply is not only a critical element in the DOTS strategy but also an essential requirement for TB treatment. Once treatment is halted for whatever reasons, the TB patient becomes at risk of MDR TB which is much more difficult and costly to treat.

Clients dependent on private commercial TB drug supplies will be at risk of supply interruptions for the following reasons: i) they may run out of funds within the course of the 6 months treatment and stop buying drugs; ii) pressing financial needs would limit their capacity to afford the required full regimen (6 months); and iii) relief from initial treatment will reduce motivation to continue the full course.

For these reasons, the following innovative approaches will be tested during the course of implementation

Financing of TB Drugs

The provision TB drugs on credit will be the object of this study. This is based on the assumption that patients are not able to afford the full course treatment and will likely discontinue. The provision of credit facility through voucher system and or credit card system will serve as an incentive to continue buying the full course required. It will also enable the patient without cash to avail of the branded commercial TB drugs.

Socially marketed TB drugs.

Studies will be undertaken to see if it is feasible to develop a socially marketed TB drugs. The idea is to see if the availability of mid-priced TB drugs would improve its affordability and therefore improve patient compliance. This approach would be ideal for patients who routinely come to the drugstore to purchase small quantities of loose generic TB drugs without prescription. While the pharmacist will counsel patients to undergo medical consultation or obtain prescriptions prior to selling drugs, clients who insist on buying drugs would be referred to the socially marketed generic TB drugs. The process of developing a socially marketed TB drugs is long and costly and may not be completed within the timeframe of this pilot implementation, however the initial studies required will be initiated under this project.

Adopt a TB patient program

This strategy is based on the active participation of the pharmacist to help in the full treatment of TB patients. It will thrive on pharmacist's sense of commitment and community service. Participating pharmacists will be encouraged to each enroll a minimum of 10 TB patients under h/her care and will be responsible in ensuring that the TB drug supply needs of these patients are adequately provided for. Drugs may come from commercial supplies for patients who can afford or from the public system for those with limited means. The pharmacist will undertake the "care" needed to get the patient fully treated. S/he can provide counseling , referrals, IEC, drug supply, and serve as a treatment partner as required.

The objective is to ensure that the needs of patients under the care of the pharmacist are fully met. There will be many variations of this strategy depending on the situation. It is important that the strategy is practical and functional. TB patients may be enlisted under the care of the NGO and assigned to the pharmacist to ensure that there is continuity of service in cases where the pharmacist is not available or the patient obtains drugs from various pharmacies. This strategy is ideal for a smaller drugstore (smaller city) where the pharmacist has adequate time to counsel and follow-up TB patients and patients develop a patronage relationship with the pharmacy..

F. Project Goal

The goal of the pharmacy-based TB DOTS initiative project is to strengthen the involvement of the pharmacies in the provision of TB DOTS services.

1) Project Objectives

Listed below are the primary objectives of the project.

- To provide accurate TB information to 80% TB clients (of pharmacies) through IEC dissemination
- To provide referrals and counseling to at least 80% of self-medicatingTB symptomatics

- To develop strong linkages with the TB DOTS centers in the 7 sites
- To improve the knowledge of NGO and pharmacy staff on TB DOTS, TB Case Management and client counseling
- To strengthen the commitment of pharmacies in the provision of TB DOTS services
- To involve pharmacies in increasing TB detection rates through pre-screening of TB symptomatics.
- To improve pharmacy drug dispensing practices

2) Intermediate Objectives

The strategy will be implemented in phases. The first phase will include piloting the strategy in 7 high burden urban centers for six months. Results will be reviewed and the strategy will be refined prior to national scale-up in the 20 replication sites.

Intermediate objectives of the first phase pilot implementation include the following:

- To establish partnership arrangements with at least 100 pharmacies in the seven urban centers to assist in TB IEC dissemination, client referral and counseling
- To establish partnership arrangements with at least three NGOs in the 7 urban centers who can provide coordination and management of the project.
- To develop appropriate TB IEC materials (brochures, flyers, posters, etc) for dissemination to self-medicating TB symptomatics.
- To reach at least 80% of self-medicating pharmacy clients with TB IEC, referrals and counseling
- To develop training materials and train at least 500 pharmacist and pharmacy assistants on TB DOTS, TB Case Management and Client Counseling.
- To establish collaborative arrangements between partner pharmacies, NGOs and TB DOTS center in the 7 urban pilot sites.
- To establish a management unit within Philippine TIPS to support all the activities of the project.

Log Frame of Pharmacy-based TBDOTS Initiative

Project Goal: To strengthen the involvement of the pharmacies in the provision of TB DOTS services in the 7 pilot sites

Objectives	Activities	Indicators
1. To provide accurate TB information to 80% TB clients (of pharmacies) through IEC dissemination	engage 100 pharmacies in 7 urban sites develop IEC materials on TB disseminate IEC materials to TB clients implement advocacy program train pharmacy staff on IEC dissemination	. Existing MOUs with at least 7 local pharmacy chapters . IEC materials developed (4 brochures, 4 posters, 2 fliers) . Independent trade audit to measure reach and distribution level
2. To provide referrals and counseling to at least 80% of self medicating TB symptomatics .	. train NGO and pharmacy staff on client counseling and referral services . attend to TB symptomatics visiting pharmacy providing them referral and counseling develop referral system to private MDs and RHU/HC	. existence of fully developed training materials on TB DOTS, TB Case Management and Client Counseling . client intercept studies . length of client interaction
3. To develop strong linkages with the TB DOTS centers in the 7 sites	. develop collaborative arrangements with the TB DOTS centers referrals of at least 80% of clients to TB DOTS center for diagnostic, microscopy, recording and monitoring of clients	number of clients referred to TB DOTS Center number of clients provided with diagnostic or microscopy services communication with TB DOTS centers
4. To improve the knowledge of NGO and pharmacy staff on TB DOTS, TB Case Management and client counseling	. train at least 500 pharmacy staff, and NGO staff on TB DOTS, TB case management and client counseling . establish partnership arrangements with at least 100 pharmacies train trainors (TOT) on TB DOTS and case management.	. attendance record in training programs . assessment through "mystery shopper" approach . 100 partnerships established through MOUs . length of client interaction .
5. To strengthen the commitment of pharmacies in the provision of TB DOTS services	develop advocacy program for pharmacies develop incentives for pharmacies develop innovative approaches like voucher	. number of pharmacy and NGO MOUs established. no of pharmacy incentives developed and

Objectives	Activities	Indicators
	system, social marketing, adopt a patient program to strengthen involvement	operational . survey of pharmacies at project end
7. To involve pharmacies in increasing TB detection rates through pre-screening of TB symptomatics	 provide pre-screening to TB symptomatics client counseling monitoring of clients by pharmacists referral of clients to TB DOTS Center 	existence of records identifying symptomatics number of TB symptomatics identified by pharmacies
8 To improve pharmacy drug dispensing practices	. client counseling on the need for prescription for TB drugs . de-emphasize serving drug needs of TB clients without prescription BCC with pharmacy staff on responsible dispensing practices	 in-depth interview of pharmacy staff mystery shopper survey client intercept studies no of TB clients buying without prescription no of TB clients served without prescription

3) Indicators

- MOUs with at least 100 pharmacies in the 7 sites by end of the 3rd month of project start-up
- MOU with at least three NGO's to provide technical support and management to project activities.
- Engagement of Ad agency to develop IEC materials
- Development of at least 3 (printed) below the line IEC materials for dissemination by professional Ad agency
- Development of training materials on TB DOTS, TB Case Management, Client Referrals and Counseling.
- TOT of at least 15 NGO staff. Training of at least 500 pharmacy staff and assistants by end of 9 months from start-up.
- Collaborative arrangements with TB DOTS center in 7 sites in place.
- Recruitment of project staff to support implementation activities.

G. Organization and Management

1) Philippine TIPS support

Philippine TIPS will provide funding support and technical guidance in the implementation of the project. The project will be organized and supported as follows:

- Program manager will be recruited to function as task manager and to provide strategic leadership for the day-to-day operations of the project. One staff assistant will assist him in the performance of his functions.
- One NGO will be engaged in each site to implement project activities and to provide technical support.
- Field Coordinators (one for each site) will be recruited to serve as monitors for the implementation of activities. Coordinators will work closely with the assigned NGO but will report directly to the project's program manager.
- Professional Ad agency will be engaged in the development of IEC materials.
- Training consultant will be recruited to develop training program, materials and assist in the implementation of training
- Survey research agency will be engaged to monitor progress and assess impact

The Technical Coordinator of the Philippine TIPS project will provide technical oversight on the over-all implementation of the project. The Health Systems Analyst will provide technical direction during the implementation of activities in the 7 demonstration sites and will support the function of the program manager. The program manager will report directly to the Health Systems Analyst and will be responsible for the day-to-day management of the project (Pls. refer to Annex 6, Fig 6, page 35 for Schematic Diagram of Project Organization and Management).

The Pharmacy initiative program manager will be the main task manager for this project. His duties include the following: 1) to provide technical guidance in the implementation of project activities; 2) to be responsible for over-all implementation of activities; 3) to assist in the planning and monitoring of all project implementation functions; and, 4) to prepare and submit complete and timely reports to the project implementation activities. (Please refer to Annex 11, page 43 Job Description of Program Manager)

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2) NGO's role as implementing agency

NGOs will be engaged and will be responsible for the implementation of the project. At least 5-6 NGO's will be appointed to cover the 3 geographic areas, (Luzon, Visayas, and Mindanao). An MOU between the project and the appointed NGO will be established and will cover the contractual arrangements between the parties. Management fees will be provided to the implementing NGOs as compensation for their role in the implementation of project activities.

3) Partner Pharmacies

At least 100 pharmacies will be recruited and engaged to assist in the implementation of activities. To guide the implementation, a separate MOU will be established between Philippine TIPS and the local pharmacy association chapter to cover the terms of engagement⁹.

4) Collaborations with other Cooperating Agencies

The two agencies that have been involved in the TB work directly or indirectly are PATH Philippines and World Vision. PATH has already developed the infrastructure in the 8 major urban centers working directly with pharmacies and local pharmacy associations. They have already developed strong working relationships with their partners and may be able to provide valuable information to improve implementation. World Vision having worked in strengthening TB service delivery in the field for so many years has a lot of staff resources and materials that could also be valuable for the project.

H. Monitoring and Evaluation

1) Trade audit and syndicated surveys

Regular monitoring of drugstore performance is essential to measure the success of the project. It is not sufficient that drugstores are left with the physical distribution of materials without monitoring their reach or effectiveness. This may be done through the use of customized trade audit or the use of syndicated surveys like omnibus surveys. It is suggested that a consumer survey research organization be engaged on a competitive basis to undertake all the needed survey requirements of the project particularly the repetition of the baseline survey (in-depth and mystery shopper) during the year. There are 2 consumer survey organizations that are best qualified to provide this service to the project (e.g., AC Nielsen, NFO Trends).

2) Mid-term-Final Evaluation

Mid-term and Final Evaluations of the Philippine TIPS project would also measure performance and the effectiveness of project implementation. These evaluations will be useful in refining the strategies or for making mid-stream strategy-shifts to improve implementation.

3) Reporting System

A simplified reporting system will be developed to monitor project implementation. Efforts will be done to ensure that reports are easy to accomplish and will not compete with the limited time of pharmacists or NGOs. Partner NGOs and pharmacists will be required to submit monthly progress reports. NGOs will assist in the completion of project reports.

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⁹ Please refer to Annex 8 – Sample MOU between Philippine TIPS and Pharmacies

I. Workplan and Timeline.

The pharmacy based DOTS model will be implemented in the next 24 months and will include the following phases in its implementation.

		20	003			20	04			20	05	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
I. PROJECT PREPARATORY PHASE												
A. Rapid Field Survey for baseline information												
Develop strategy for rapid field survey												
Develop instruments needed for survey												
Collect field survey data												
Analyze data and summarize findings												
B. Development of Pharmacy based DOTS strategy												
Develop comprehensive strategy with budget guides												
Discuss strategy and obtain concurrence among stakeholders												
Refine and finalize strategy												
Develop budget and obtain concurrence												
C. Organize, recruit staff,												
Recruit staff												
Identify partner pharmacies, NGO partners												
Establish project management unit												
II. PROJECT IMPLEMENTATION PHASE												
A. Preparatory Activities												
Short-list partner pharmacies , develop MOU												
Finalize MOU with collaborating NGO												
Finalize subcontract with Training Institution												
Finalize subcontract with Ad Agency for IEC Development												
B. Development of IEC Materials and Training Program												
Develop training program for partner pharmacist and NGOs												
Develop and pretest IEC materials												
C. Implementation of Activities in Pilot Sites												
Implement dissemination of IEC Materials												
Implement Client Counseling and Referrals												
Implement TOT for NGO partners												
Implement Training of Pharmacists and PA by NGOs												
Implement Innovative Strategies for Drugs supply												
Implement networking with TB Dots Center												
III. Monitoring and Evaluation												
Review/refine strategy												
Prepare strategy for national scale-up (22 sites)												
IV. National Scale-up								•				

Notes:

E. Scale-up (22 sites)

A. Preparatory Phase 2 months (Aug-Sept 03) B. Development of IEC, training 2 months (Oct-Nov) C. Implementation 6 months (Dec – May) D. Evaluation 1 month (June) 12 months (July 03 -July 04)

J. Budget

1) Description of Project Inputs

Personnel

Item	% of Time	LOE
		(P/M)
1. One Program Manager	100	12/12
2. Six Field Coordinators (one per site)	100	12/12
3. One Staff Assistant	100	12/12
TOTAL		

2) Project Activities

IEC

A professional Ad agency will be engaged to develop IEC materials through a competitive bid process. Below is the list of IEC materials that will be developed. Dissemination of these materials will be under the responsibility of the partner pharmacies under the supervision of the NGO.

- 1. Development costs of IEC Materials
 - a. Brochure (2 kinds)
 - b. Poster (4 kinds)
 - c. Flyer (2 kinds)
- 2. Production
 - a. Brochure (50,000 pcs) each
 - b. Poster (5,000 pcs.) each
 - c. Flyer (50,000 pcs) each
- 3. Dissemination of IEC materials
 - a. 100 partner pharmacies in the 7 sites will be responsible for distribution
 - b. 5-6 NGOs will be engaged to assist the pharmacies with this function.

Training

A local training consultant will be hired to develop training materials. NGO staff and some selected pharmacy staff will be recruited as trainors (30 trainors). The local consultant will conduct TOT training for the 30 trainors. The 30 trainors will handle the training of 300 pharmacy staff from the 100 partner pharmacies under the supervision of the training consultant.

- 1. Development of training materials
 - a. Training Consultant (STTA), LOE: 30 days) Local
 - b. Pre-test materials
- 3. Production of training materials
 - a. TOT training (30 participants)
 - b. Pharmacy staff training (600 participants)

- 4. Implementation of training
 - a. TOT training (30 participants), 2 sessions. First session: TB DOTS and TB Case Management; 2nd session: Client Counseling. Venue: Cebu; Duration: 3 days for each training session. Total: 6 days
 - b. Training of Pharmacy staff (3 sites) 300 participants
 - i. First training session covers TB DOTS and TB Case Management (3 days)
 - ii. Second Training session: Client counseling, (3 days)
 - iii. Each session: 300 participants: Total 600 participants for 2 sessions. (Total : 6 days)

Subcontract

Subcontract arrangements (MOU) with the following agencies will be developed and implemented:

- 1. **NGO** at least 6 NGOs will be engaged in the implementation of the project (One each for the following areas: 1) NCR/QC; 2) Cavite; 3) Iloilo, 4)Cebu; 5) Dagupan; 6)Cag de Oro; and 7) Davao. Management fee or percentage of indirect cost will be paid to NGOs for implementing the project.
- 2. **Ad Agency** one local ad agency will be engaged to develop IEC materials. Cost of subcontract will depend on the kind and quantity of the materials that will be produced. Normally agency fees are computed as percentage of total development and production costs. (Pls. refer to list of IEC materials).

Monitoring

Monitoring of project implementation activities will be provided for: Allowance for field travel of Philippine TIPS Technical Coordinator and Health Systems Analyst in the 7 field sites will be provided. Budget allowance for 2 trips within the 12 month period will be provided. One trip for the Training Advisor and Communications Advisor will also be provided within the duration of the project

Evaluation

- One Trade Audit will be undertaken within the year. The purpose of the trade audit is to measure the level of distribution and reach of IEC materials in the 7 implementation sites. Trade Audit will be performed by a local survey research agency under an STTA mechanism.
- The baseline survey on pharmacists and pharmacy assistants through in-depth interviews and "mystery client" approach will be repeated at the end of the 6th month implementation. This survey will measure changes in knowledge, attitudes, dispensing practices, client knowledge and buying behavior.
- Mid-term evaluation will also be undertaken to verify the effectiveness of the over-all strategy, impact of the project and refinements that have to be made prior to the national scale-up. This will be conducted at the end of the 6th month implementation period. A consultant will be hired through an STTA mechanism.

Technical Assistance (International)

Technical support will be provided during the course of project implementation. One International Consultant will be engaged on a short-term technical assistance arrangement to provide technical backstopping for project implementation. Total LOE is 30 days for the 12 months period.

Notes:

10.1 Estimated Budget (Summary) (for 7 demonstration sites) USD

0	Personnel Costs	35,000
0	IEC	20,000
0	Training	30,000
0	Subcontract	40,000
0	Evaluation	15,000
0	Implementation	70,000
0	TA	40,000
	0 Total	250,000 USD

Annexes

Annex 1

BEST PRACTICES INVOLVING PHARMACIES IN THE PHILIPPINES

Review of relevant experience in the use of pharmacies for reaching self-medicating clients.

Available information on the use of drugstores for reaching self-medicating clients is still limited. The experience in the two interventions in the Philippines can provide insights and lessons for the development of the pharmacy based TB DOTS strategy.

Example 1

PHARMACY INVOLVEMENT IN THE PROMOTION/SALE OF STD SYNDROMIC KITS IN THE PHILIPPINES

In 1999, PATH Philippines through its ASEP (Aids Surveillance and Education Project) established a network of 81 partner pharmacies in 8 major urban centers in the Philippines. These pharmacies promoted the syndromic case management for STD clients particularly among male symptomatics. Pharmacies responsibilities included the counseling of STD clients seeking treatment, the dissemination of important and accurate information on STD and referrals to medical providers as needed. PATH provided IEC materials, counseling materials and training to enable pharmacy staff to perform their duties.

The role of pharmacies has long been recognized as a powerful link in the health care service delivery. Because they are most accessible and trusted, they have been increasingly sought by many for medical advice.

PATH's experience in the 8 key cities demonstrated the success of client counseling provided by pharmacist. For the first six months of 1999, pharmacy staff were able to counsel and convince over 80 %, of walk-in STD symptomatics (male) without prescriptions to purchase Triple S kits (complete syndromic management kit containing full regimen antibiotics, condoms, partner cards and STD information)

The partnership established among 81 community pharmacies has demonstrated that this frontline service point for self-medicating symptomatics has proven very effective in reaching STD clients. In Angeles, the participating pharmacists have persuaded more than 90% of those who routinely purchased 1-2 capsules of antibiotics for STD treatment to buy the complete treatment regimen provided by Triple S. This was a major contribution in curtailing the rapidly increasing antimicrobial resistance in the country.

Another similar intervention using pharmacies in the Philippines was piloted in November 1999. PATH in collaboration with DKT International with funding support from Packard Foundation launched a project to expand contraceptive choices among couples. This involved the promotion of Emergency Contraceptive Pills (ECP) an alternative contraceptive method for women. The project was implemented through the pharmacy network of 500 pharmacies in key urban cities. Some of the key results of the intervention include the following:

Example 2

DRUGSTORE INVOLVEMENT IN EXPANDING CONTRACEPTIVE CHOICES THROUGH ECP IN THE PHILIPPINES

This project involved more than 500 pharmacies in the 8 urban centers: Angeles, Pasay, Iloilo, Cebu, Davao, General Santos and Zamboanga. Over 2,000 pharmacy staff and 72 NGO staff were trained on family planning, contraceptive management and emergency contraception.

The partnership with these pharmacies was able to provide the project a number of advantages. This includes the following: a) it facilitated the cooperation of member pharmacists to support the objectives of the project; b) it fostered a sense of ownership lending genuine interests in the implementation of activities; c) it enabled the partners to share valuable information about clients buying practices regarding emergency contraception; d) it enabled the association to implement training cost effectively in each area involving wider support from the private sector and the local community; e) it provided the climate for a strong and healthy collaborative relationships in the marketing of contraceptive methods particularly ECP; f) it enabled the pharmacy staff to provide extra attention towards the promotion of family planning particularly ECP; and, g) it allowed them to spend adequate time in counseling walk-in clients needing contraceptive information.

The extensive counseling services provided by the partner pharmacists expanded service delivery making contraceptive information and services accessible to the hard to reach population groups who bypass the formal delivery structure.

As a result of the intervention, over five thousand clients were reached with essential family planning and reproductive health messages through counseling and many more were reached through drugstore dissemination of print media. For the initial two hundred clients who purchased ECP, unwanted pregnancy was prevented and the likelihood of abortion reduced.

Annex 2

TARGET AUDIENCE OF THE PHARMACY-BASED TB DOTS INITIATIVE

1. Project beneficiaries

The primary target audience and beneficiary of this project are the self medicating TB clients who go straight to pharmacies to obtain drugs by-passing medical providers. Current estimates indicate that there are 10.1 M TB clients under this category in the 22 replication sites of the project (Pls. see Table 2).

The secondary target audience are the pharmacies and NGOs who would enter into a partnership arrangement with the project to provide IEC, referrals and counseling to clients. These pharmacy and NGO staff do not have any training in TB DOTS and will benefit from the training provided under this project. It is estimated that 100 pharmacies and 5-6 NGOs will join the initial pilot implementation in the 7 urban sites. Five hundred pharmacists and pharmacy assistants will be trained on TB Case Management and Client Counseling under this project.

1.1. Target Pilot Implementation Sites

Table 1

SEVEN DEMONSTRATION SITES FOR PHARMACY BASED TBDOTS MODEL									
		PTB (Cases	PTB Mo	orbidity				
CITY	POPULATION	NO*	RATE	NO.*	RATE				
DAGUPAN	130, 328	166	128	54	41.6				
QUEZON CITY	2,173,831	7,793	381	525	25.6				
CEBU CITY	718,821	1,766	256	293	42.5				
ILOILO CITY	365,820	717	206	172	49.3				
CAGAYAN DE ORO CITY	461,877	2,799	613	122	26.7				
DAVAO CITY	1,147,116	3,787	356	362	34				
GEN SANTOS CITY	411,822	995	276	127	35.3				
ANGELES CITY	263,971	1,163							

Source: PHS 1997* per 100,000

1.2 Target TB Self-Medicating Clients

Table 2

CITY	POPULATION (2000)	MORT (19	ALITY	MORBI (199		SELF- MEDICATING
		NO. ¹	RATE ¹	NO.	RATE	x 0.25
DAGUPAN	130,328	54.00	41.569	166.00	127.8	41.50
MANILA	1,581,082	1,010.00	62.538	15,524.00	961.2	3,881.00
QUEZON CITY	2,173,831	525.00	25.639	7,793.00	380.6	1,948.25
CABANATUAN	222,859	70.00	33.386	113.00	53.9	28.25
BATANGAS CITY	247,588	73.00	33.33	62.00	28.3	15.50
SAN PABLO	207,927	0.00	0	225.00	118.3	56.25
LUCENA	196,075	58.00	30.928	461.00	245.8	115.25
PUERTO	161,912	38.00	27.225	450.00	322.4	
PRINCESA						112.50
NAGA	137,810	62.00	46.478	198.00	148.4	49.50
LEGAZPI	157,010	61.00	40.785	409.00	273.5	102.25
ILOILO CITY	365,820	172.00	49.345	717.00	205.7	179.25
BACOLOD	429,076	211.00	49.735	727.00	171.4	181.75
CEBU CITY	718,821	293.00	42.471	1,766.00	256	441.50
TACLOBAN	178,639	101.00	55.739	-	-	0.00
CAGAYAN DE ORO	461,877	122.00	26.72	2,799.00	613	699.75
DAVAO CITY	1,147,116	362.00	34.082	3,787.00	356.5	946.75
BAGUIO	252,386	26.00	10.515	1	1	0.00
ROXAS	126,352	47.00	37.405	161.00	128.1	40.25
GENERAL SANTOS	411,822	127.00	35.28	995.00	276.4	248.75
LIPA	218,447	50.00	27.211	130.00	70.7	32.50
OZAMIZ	110,420	44.00	41.57	417.00	394	104.25
PASIG	505,058	181.00	36.585	2,013.00	406.9	503.25
OROQUIETA	59,843	35.00	60.788	539.00	936.1	134.75
SAN FERNANDO	102,082					0.00
DUMAGUETE	102,265	36.00	36.895	87.00	89.2	21.75
TARLAC	262,481	473.00	48.245	951.00	97	237.75
CAVITE CITY	99,367	45.00	49.162	98.00	107.1	24.50
TOTAL	10,768,294	4,276.00		40,588.00		10,147.00

¹Per 100,000 population

50% of those currently sick are not seeking treatment. Half of those who are seeking treatment are self- medicating

2. Profile of Potential Pharmacy Partners

2.1 Pharmacy Partners

There are over 7,000 registered pharmacies in the country, four thousand are official members of the Drugstore Association of the Philippines (DSAP). It is expected that not all drugstores will be attracted or will be willing to participate in the program. Over 40% of all drugstores in the country belongs to a chain. There are many chains of drugstores, (e.g., Mercury, Rose, Watson, etc), the largest is Mercury Drugstore with over 2, 000 outlets spread throughout the country. While Mercury drugstore chain serve over 40%? of private sector TB drugs, experience suggest that they are less likely to participate in this program. Past attempt to include Mercury drugstores have not been successful. The potential partners of this program are the medium size independent drugstores who in the past have collaborated in similar initiatives.

2.2 Suggested Drugstore Selection Guidelines

Twenty replication sites have been identified and will be the focus of this intervention. These sites were selected based on their high TB morbidity and mortality rates. Among these sites, seven, were identified for rapid appraisal. These sites were chosen because of presence of TB DOTS centers who will provide the diagnostic and microscopy services to clients.

From these sites, potential drugstores will be identified and will be encouraged to join the program based on the following criteria:

- Strategic location
- Number of TB clients
- Willingness to participate
- Currently selling TB drugs
- Have pharmacist on staff including at least 2-3 pharmacy assistants

Annex 3

KEY FINDINGS FROM PHARMACY STUDY

One hundred seventy pharmacists, pharmacy owners and pharmacy assistants in seven urban sites were surveyed to verify TB DOTS knowledge, training, dispensing practices, attitudes and general behavior with regards to their management of TB clients.

A. Respondents:

TOTAL NUMBER OF RESPONDENTS

	CDO	CEBU	DAGUPAN	DAVAO	GEN SAN	ILOILO	QC	TOTAL
No. of Pharmacists								
Interviewed	14	10	11	13	11	12	13	84
No. of Pharmacy								
Assistants								
Interviewed	7	11	10	10	10	10	6	64
No. of Pharmacy								
Owners Interviewed	3	2	3	0	3	0	2	13
No. of Pharmacies								
Visited for KII	11	12	12	11	12	13	15	86
No. of Pharmacies								
Visited for MS	25	26	24	24	24	25	22	170

B. Key Findings

Below are the key findings of the study as determined from the field interviews and mystery shopping activities.

B1. Pharmacist and pharmacy assistants (PA) knowledge of TB and TB DOTS

All of the pharmacists and more than 92% of the pharmacy assistants interviewed said they are familiar with the disease tuberculosis. However almost all of these pharmacists and PAs (92%) were unable to answer correctly when asked when TB is transmitted.

Majority of both pharmacists and PAs know that TB is transmitted through respiratory droplets suspended in the air (airborne) although there was one PA who said that it could be acquired through sexual intercourse.

When asked how TB is detected the most frequent answer given among pharmacists is through chest x-ray. Among PAs, the most frequently given answers were chest x-ray and physical examination. Detection of TB through sputum exam was one of the most frequent answers given in only Iloilo City among pharmacists and in Iloilo and Quezon City among pharmacy assistants.

When asked regarding the duration of treatment, 46-79% of pharmacists answered 6 months while 35-64% of the Pas answered the same.

Only 16% of the pharmacists interviewed and 13% of the PAs claimed to have heard of TB DOTS. Pharmacy assistants who have heard of TB DOTS came from only four out of the seven study sites (Cagayan de Oro, General Santos, Iloilo, Quezon City). In Iloilo, where World Vision has been active in the training of TB DOTS, only a third of the PAs surveyed have heard of TB DOTS.

B2. Pharmacist/PA Experience and Training

Seventy-nine out of 83 (95%) of the pharmacists interviewed are holders of a degree in B.S. Pharmacy, while the rest are college graduates of different courses (i.e. Engineering, Biology). Among pharmacy assistants, 90% have reached college or have taken a vocational course.

Although 72% of the pharmacists reported having undergone any health training, only 10 out of 81 (12%) have received training on TB. Among pharmacy assistants, 40% were able to undergo any health related training while only 2 out of 64 (3%) have received training on TB.

Only 13% of the pharmacists as well as the PAs interviewed have worked for less than a year in their present place of work.

B3. Pharmacy Dispensing Practices

a. Prescription

According to the interviews, 86% of pharmacists ask for prescriptions when dispensing anti-TB drugs while 86% of pharmacy assistants claim to do the same. Results from the mystery shopping activity, however, show that only 60% of pharmacy personnel ask for a prescription from clients who want to buy anti-TB drugs while more than half or 51% sold anti-TB drugs to a client even without a prescription.

Both pharmacists and PAs admitted that they allow clients who are familiar to them (i.e. regular buyers) to buy drugs without presenting a prescription. This is especially true if they feel the clients are buying for "maintenance" purposes.

49 out of 83 (59%) pharmacists reported having clients who ask to reduce the number of drugs prescribed to them by their doctor. Among pharmacy assistants, 51 out of 64 (80%) reported the same. Ninety-two percent of pharmacists and 76% of PAs admitted to complying with this type of request.

69 out of 82 (84%) pharmacists reported having clients who ask to reduce the quantity of drugs prescribed to them by their doctor. Among pharmacy assistants, 57 out of 63 (91%) answered the same. 96% of pharmacists and 87% of PAs admitted to complying with this request.

b. IEC

Very few pharmacies have available IEC materials on TB. Among the pharmacists interviewed, only 9 out of 77 (or 12%) said they had IEC materials on TB while among pharmacy assistants, only 5 out of 64 (or 8%) admitted the same.

c. Counseling

When asked if they provided counseling to clients, 83% of the pharmacists answered that they did while 69% of pharmacy assistants answered the same. Counseling incidence seems to be highest in General Santos (100%) and Cagayan de Oro (92%) among pharmacists and Cagayan de Oro (100%) and Davao (80%) among pharmacy assistants. However, most of the respondents' understanding of counseling seems to be limited to giving the clients advice on how to take their medication.

Results from the mystery shopping activity, however, show that counseling (how to take medication, compliance with recommended dosage and length of treatment, consequences of not taking drug regularly,

side effects of the drug) occurred in only 6-7% of the pharmacies visited. Counseling was most frequent in Davao and General Santos while no incidence of counseling was reported in Cagayan de Oro and Cebu City.

Counseling on TB transmission, in particular, was given in 9 out of the 86 pharmacies (11%) visited and was most frequent in Davao where it was given in 7 out of 12 pharmacies.

d. Referral

When asked if they referred clients to private doctors, rural health units (RHUs) or health center (HCs), 80% of the pharmacists answered they did while 77% of the PAs answered the same. Referral incidence seems to be highest in General Santos (100%) and Dagupan (91%) among pharmacists and Davao (90%) and Cagayan de Oro (86%) among pharmacy assistants.

Results from the mystery shopping activity show that referral to private doctors occurred in 63% of the pharmacies visited while referral to RHUs or health centers occurred in 16% of the pharmacies visited.

e. Sales incentives/discount/credit

Less than half of the pharmacists (27%) and PAs (38%) interviewed said that they gave discounts on anti-TB drugs to clients. Likewise, volume discounts are also provided by only a minority of the pharmacies and furthermore, are not seen to affect the amount of drugs clients purchase.

Less than 25% of the pharmacies visited provide credit to clients. Moreover, credit is usually only provided to regular or long-time customers or friends of the pharmacy owners.

f. Length of client interaction

Both pharmacists and PAs estimate that the average amount of time they spend in dealing with each client asking or buying anti-TB drugs is 3 minutes. Time spent with clients does not vary much between cities. However, the average amount of time PAs spend with TB clients is somewhat less compared to that of pharmacists' (2.7 to 3 minutes).

The average amount of time clients have to wait for before they are attended to by pharmacy personnel is 4 minutes.

B4. Client Buying Practices

Pharmacists and PAs estimate that an average of 6-7 out of 10 clients of anti-TB drugs buy their medication with prescription.

Majority of the pharmacists and pharmacy assistants interviewed reported that clients who preferred generic drugs over branded drugs did so because they found generic drugs to be more affordable. Among those clients who preferred branded over generic, almost 50% of both groups replied that this was because clients viewed branded drugs as more effective than generic ones. Another reason also frequently cited for buying branded rather than generic is that it was what the doctor prescribed.

According to pharmacists and PAs, 5 out of 10 customers thought that generic drugs were of lower quality than branded drugs.

More than a third of the pharmacists and PAs interviewed reported that most of their clients purchased anti-TB drugs for a weeks supply. However, some of the respondents (20%) also answered that most of their clients bought supplies of anti-TB drugs good for a month. None of the respondents observed clients purchasing drugs at any one time for more than a months supply.

B5. Client Perceptions

a. Affordability

Both pharmacists and pharmacy assistant reported that 5 out of 10 clients seemed to find the cost of anti-TB drugs expensive. However, only a minority of these clients were reported to complain about the quantity of drugs they need to buy. This is probably because majority of clients buy the drugs in small amounts (some clients were observed to buy drugs for less than 3 days supply). Thus, while clients do not seem to find the cost of anti-TB drugs expensive, the general amount of drugs being bought per transaction would seem to indicate otherwise.

b. Stigma

Twenty-seven percent of pharmacists and 32% of PAs reported that they encounter clients who are shy or hesitant in asking for or buying anti-TB drugs. One reason for this, given during the FGD discussions, may be that clients themselves are unaware that they have TB since sometimes their doctors do not tell directly them. The minority of clients who are shy or hesitant to ask for anti-TB drugs tend to either ask for "vitamins para sa baga" (vitamins for the lungs) or tell pharmacists they are buying for friends or relatives. Others may simply present their prescription without saying anything or whisper when placing their request.

B6. Providers Prescription Practices

Among the pharmacists and PAs interviewed, it was reported that about a third of attending physicians tend to prescribe a month's supply of anti-TB medications to their clients. However, there are also around 26-34% of doctors who were reported to prescribe 6 months supply of anti-TB drugs.

Annex 4

POTENTIAL PHARMACY PARTNERS IN THE 7 IMPLEMENTATION SITES

The pharmacies listed below have been the respondents of the rapid field appraisal. Baseline information on these pharmacies have already been obtained and will be helpful in evaluating performance.

1. CEBU CITY

- Cebu Ever Drug
- Diding Pharmacy
- Gaisano Main Pharmacy
- Dayang Pharmacy
- Llorente Pharmacy
- Uptown Drugstore
- Letty Pharmacy
- Rose Pharmacy
- Doctor's Choice
- Farmacia de Capitol
- Watson's Pharmacy
- La Nueva Pharmacy

2. ILOILO CITY

- San Roque Drugstore
- Miscellaneous Drugstore
- Ferj's Pharmacy
- POM's Pharmacy
- Paul and Glory Pharmacy
- Lifeline Pharmacy
- Lady Pharmacy
- V-Med Pharmacy
- Ivory
- EVZ Pharmacy]
- Medicus Pharmacy
- Erle Pharmacy

3. DAVAO CITY

- Ricardo Limso Medical Center Pharmacy
- Mercury Drug (Bolton)
- Mercury Drug (Lapu-Lapu)
- Rose Pharmacy (Ilustre)
- Allied Drug
- ASP Pharmacy
- Farmacia Southern (Br. 6)
- Amesco Bonifacio Pharmacy
- Farmacia Sta. Ana
- Davao Union Drug

• Davao Save Here Pharmacy

4. CAGAYAN DE ORO

- C & k (Br. 1 & 2)
- Dynamic Pharmacy
- Fair Drug
- Shining Pharmacy
- Country Drug
- Rose Pharmacy
- Mercury Drug (Limket Kai)
- Sabal Hospital Pharmacy
- Oro Pharmacy
- Naggina Drugstore

5. QUEZON CITY

- C & N Drugstore
- Emilene's Drugstore
- EC Drugstore
- Express Drug
- Meadows Drug
- Mercury Drug (Fairview)
- OTC Drugstore
- Save More Drug
- Shop-a-Drug
- Shoppesville Drugstore
- Super K Drug
- Tropical Hut Drugstore
- Centerpoint Drugstore
- Adcare Pharmacy
- Super K Drug

6. CAVITE

• Pharmacies to be determined.

7. DAGUPAN

- Farmacia Flor
- St. Joseph Drugstore
- Abundance Drugstore
- Cyclone Drugstore
- D&D Drugstore
- Shanel Drugstore

- Roslin Pharmacy
- St. Vincent Pharmacy
- Maia Pharmacy
- Mercury Drug
- Farmacia Urduja
- Pong's Drugstore

Annex 5

LIST OF POTENTIAL NGO PARTNERS

These NGOs have been working on family planning or TB programs in the field and are familiar with the

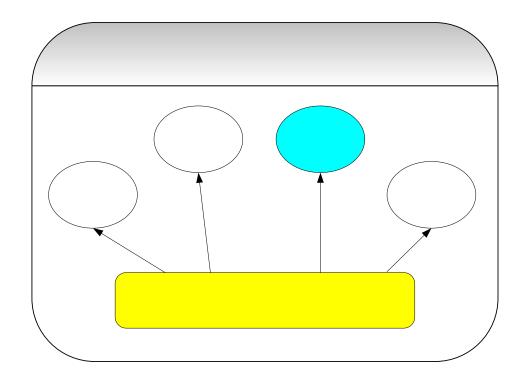
Implementation Sites

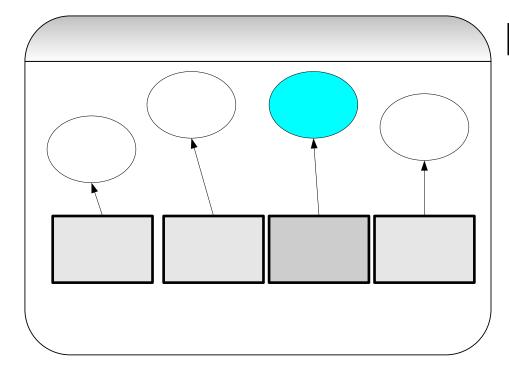
Potential NGO Partner

Cavite Kabalikat
 Quezon City Kabalikat
 Dagupan TBD
 Iloilo City Kabalaka Foundation
 Cebu City Bidlisiw
 Cagayan de Oro City TBD

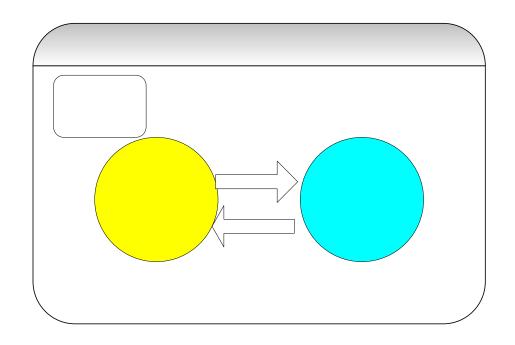
7. Davao City Waves Foundation

Annex 6
SCHEMATIC DIAGRAM OF THE PHARMACY BASED TB DOTS INITIATIVE

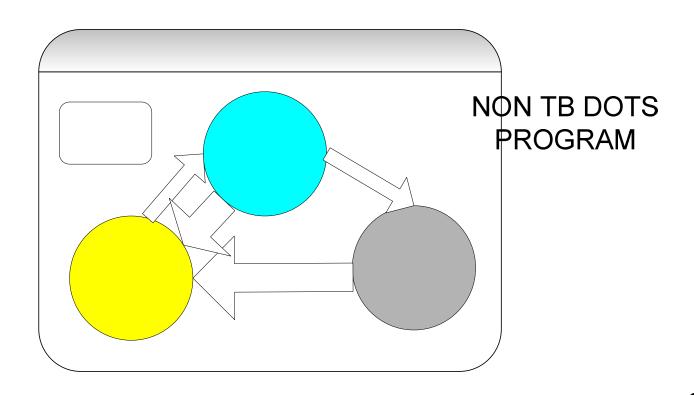


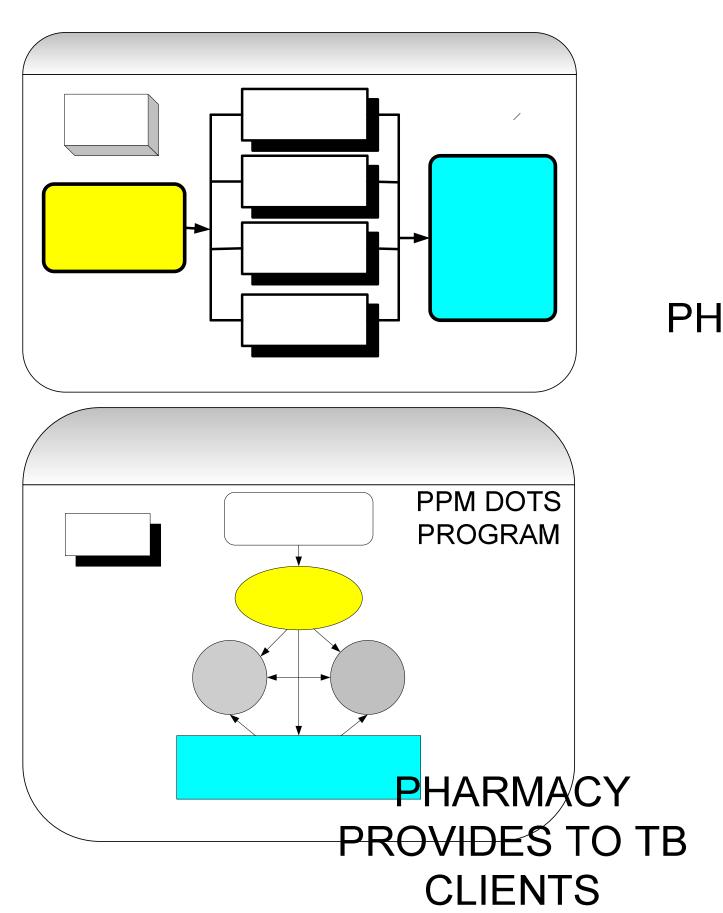


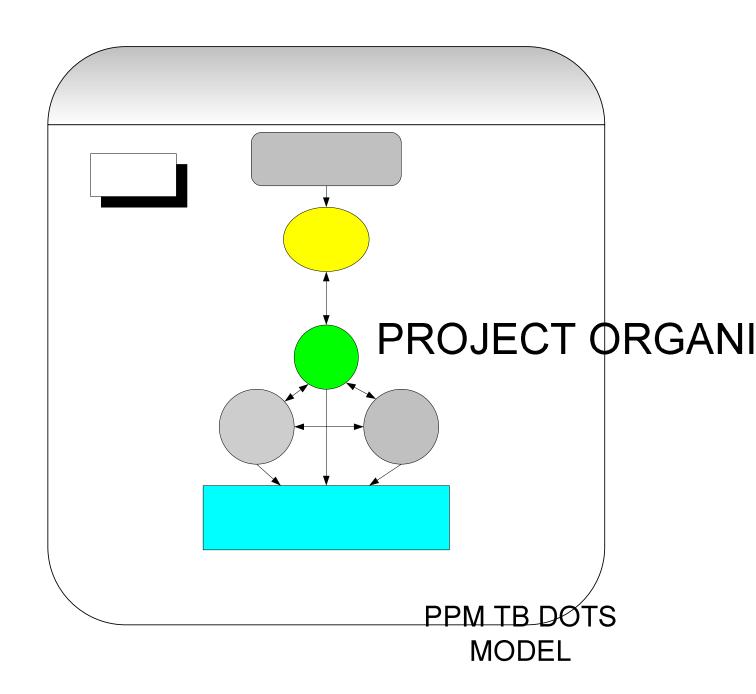
PRIVATE

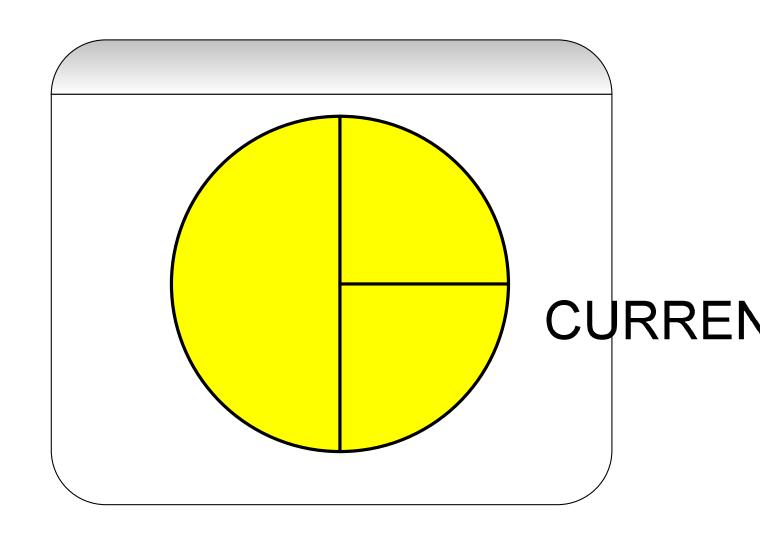


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Annex 7

SAMPLE MEMORANDUM OF UNDERSTANDING BETWEEN PHILIPPINE TIPS AND AN NGO

MEMORANDUM OF UNDERSTANDING

1. Parties
The Philippine TIPS project and NGO, hereinafter referred to as "designated agency", agree to cooperate in the implementation of the pharmacy based TB DOTS Initiative activities in the following geographic areas:
The Philippine TIPS project aims to strengthen the involvement of the pharmacies in the provision of TB DOTS services in the above mentioned geographic areas through their participation in the dissemination of IEC, provision of referrals and client counseling on Tuberculosis to Tb clients.
The designated agency,(name) is . currently involved in the and has established its operation in these
areas.
2. Period of Cooperation
The period of cooperation shall be for two years, commencing the first day of (month) year until the last of (month) (year).
3. Objectives:
 To identify and establish partnership arrangements with at least 40 pharmacies in the following areas:
 To assist in the training of pharmacy staff on TB DOTS strategy, TB case management and client counseling
 To monitor the dissemination of TB IEC materials, client counseling, referrals and other responsibilities assigned to the cooperating pharmacies in the program
 To establish collaborative arrangements between partner pharmacies, TB DOTS center, RHU/HCs and other stakeholders in the project.
 To manage the implementation of project activities in the area.
4. Terms and conditions
A. The Philippine TIPS project shall:
a. Provide management fee in the amount of : payable quarterly to
the designated partyProvide TOT to the NGO staff on TB DOTS, TB Case Management, and Client Counseling
c. Provide all the IEC materials needed in the project
d. Provide all the training materials needed to train pharmacy staff

e. Provide technical assistance in the implementation of activities

В.	The designated agency,shall:					
		Develop a workplan for the implementation of activities				
		Assume the responsibility in executing this project in the designated area:				
		Manage the implementation of all project activities				
		. Coordinate, monitor and supervise all implementation particularly the function of partner pharmacies				
	e.	Provide technical guidance in the implementation of the program				
	f.	Provide the project with accurate, complete and timely reports on project performance				
	g.	Supervise all training activities.				
	h.	6 T J				
	i.	Coordinate with DOH/RHU/HC for procurement of TB drug supplies				
	j.	Coordinate with the designated TB DOTS center for all other services that will be needed by TB clients.				
C.	Budge	t (Est)				
		Management fee				
	b.	-				
	c.	Operating Cost				
n	Donalt	ies/Guarantee				
υ.	a.	Either party shall have the right to terminate the understanding at any time provided the				
	a.	either party gives 30 days notice in writing indicating reason for termination				
	h	Failure to implement the activities based on the agreed upon workplan and timeline wi				
	0.	be ground for termination of this agreement				
F.	Program Evaluation					
₽.	a.	The NGO is required to submit to the project quarterly report based on the established				
	ч.	reporting system (Pls. refer to Annex 9 – Implementation Plan). The Philippine TIPS				
		project shall evaluate the performance of the designated NGO in the implementation o				
		the terms of this MOU every six months. Performance evaluation shall be discussed				
		including any need for improvements or changes in the implementation plans.				
F.	Duration					
-•	a.	The MOU shall be valid for two years after which, renewal may be initiated by the				
		project based on availability of project funds and project requirements				
	b.					

Signature (Executive Director, NGO_

Annex 8

SAMPLE MEMORANDUM OF UNDERSTANDING BETWEEN PHILIPPINE TIPS AND A LOCAL PHARMACY ASSOCIATION

MEMORANDUM OF UNDERSTANDING

1. Parties					
The Philippine TIPS project and the Local Pharmacy Association , hereinafter referred to as "designated agency", agree to cooperate in the implementation of the pharmacy based TB DOTS Initiative activities in the following geographic areas:					
The Philippine TIPS project aims to strengthen the involvement of the pharmacies in the provision of TB DOTS services in the above mentioned geographic areas through their participation in the dissemination of IEC, provision of referrals and client counseling on Tuberculosis to Tb clients.					
The designated agency,(name) is . currently involved in the and has established its operation in the areas.					
2. Period of Cooperation					
The period of cooperation shall be for two years, commencing the first day of (month) year until the last of (month) (year). 3. Objectives:					
 To disseminate IEC print materials to TB clients coming to the pharmacy for TB information or drug needs. To provide counseling to TB clients coming to the pharmacy To assist in the training of pharmacy staff on TB DOTS strategy, TB case management and client counseling To monitor the dissemination of TB IEC materials, client counseling and referrals. To cooperate with the implementing NGO, other partner pharmacies, TB DOTS center, RHU/HCs and other stakeholders in the project. To prepare and submit monthly reports to the implementing NGO in the area. 4. Terms and conditions					
G. The Philippine TIPS project shall:					

- a. Provide management fee in the amount of :______ payable quarterly to the designated party
- b. Provide training to the pharmacy staff on TB DOTS, TB Case Management, and Client Counseling
- c. Provide all the IEC materials needed in the project
- d. Provide all the training materials needed to train pharmacy staff
- e. Provide technical assistance in the implementation of activities
- f. Provide funding support for all project implementation activities.

g. Provide an NGO implementing agency to assist in the implementation of activities in the area

H. The designated local pharmacy association, _____shall:

- a. Responsible in the dissemination of IEC materials to TB clients.
- b. Responsible in providing client counseling and referrals to TB client.
- c. Responsible in coordinating will all the partner pharmacies under its jurisdiction
- d. Assist in the implementation of all project activities
- e. Prepare accurate, complete and timely monthly reports on project performance
- f. Assign a contact person to be the contact point for the project
- g. Coordinate with DOH/RHU/HC for procurement of TB drug supplies
- h. Coordinate with the designated TB DOTS center for all other services that will be needed by TB clients.

I. Budget (Est)

- a. Management fee
- b. Training
- c. Operating Cost

J. Penalties/Guarantee

- a. Either party shall have the right to terminate the understanding at any time provided that either party gives 30 days notice in writing indicating reason for termination
- b. Failure to implement the activities based on the agreed upon workplan and timeline will be ground for termination of this agreement

K. Program Evaluation

a. The NGO is required to submit to the project quarterly report based on the established reporting system (Pls. refer to Annex 9 – Implementation Plan). The Philippine TIPS project shall evaluate the performance of the designated NGO in the implementation of the terms of this MOU every six months. Performance evaluation shall be discussed including any need for improvements or changes in the implementation plans.

L. Duration

Annex 9

REPORTING SYSTEM

The following reports will be developed in the course of project implementation:

- Patient Referral Form
- Drugstore Monthly Report
- NGO Monthly Report
- Request for Sputum Examination
- Patient Treatment Card
- Pharmacy TB Suspect Register Card

Annex 10

JOB DESCRIPTION OF PROGRAM MANAGER FOR THE PHARMACY-BASED TB DOTS INITIATIVE

The program manager will be mainly responsible for ensuring that the objectives of the pharmacy based TB DOTS initiative are achieved. S/he will provide strategic leadership in the development and implementation of the project activities. S/he will receive technical guidance from the Philippine TIPS Technical Coordinator. S/he will be directly responsible to the Health Systems Analyst for the implementation of h/her function.

Responsibilities:

- Develop strategies that will expand pharmacy involvement in the TB DOTS program.
- Supervise the implementation of IEC program using both print mass media and interpersonal channels (client counseling) to reach significant number of self medicating pharmacy TB clients.
- Supervise and monitor NGO performance in the implementation of project activities.
- Take the lead role in the development of advocacy program for pharmacies involved in the project.
- Responsible in developing non-monetary performance incentive schemes to strengthen pharmacist motivation in performance of their tasks.
- Responsible in the development and implementation of innovative strategies to strengthen pharmacy involvement in TB DOTS.
- Assist in the preparation of MOUs or subcontracts to engage professional Ad agencies or training institute in the development and execution of both communication and training activities.
- Assist in evaluating the effectiveness of communication strategies.
- Assist in the planning and implementation of all training activities.
- Assist in the evaluation of the effectiveness of training and develop strategies or recommendations to improve training implementation.
- Assist in the development of a collaborative relationship between pharmacies, NGOs and TB DOTS centers involved in the project.
- Work with the appropriate officials of the DOH and USAID and ensure the timely submission of project reports.
- Determine need for short-term consultants, prepare scopes of work for these consultants, identify appropriate individuals and prepare needed documents to engage their services
- Coordinate activities with other project relevant project implementation activities preventing duplication of efforts and maintaining maximum synergy

Desired Qualifications:

- At least 5 years of documented relevant experience in program management particularly in managing communication program.
- In-depth knowledge of the media environment in the Philippines
- Knowledge in the implementation of training programs
- Understanding and familiarity with the private sector particularly the pharmacies, drug manufacturers and other parties involved in the implementation of the private sector TB program
- Bachelor's degree in communication, public health, or management or marketing,

:

Annex 11

LIST OF DRUGSTORES ASSOCIATION OF THE PHILIPPINES (DSAP) CHAPTER HEADS IN THE SEVEN IMPLEMENTATION SITES

CHAPTER PRESIDENTS

1. Quezon City, Central NCR : Mrs. Helen Serafica

Express Drugstore Fairview, Central Mall Commonwealth, Q.C. Tel. No. 427-9958

2. Dagupan, Pangasinan : Mr. Lionel Tambaon

Linda's Pharmacy, Cor. Rizal & Tambayoyong St Manaoag Pangasinan Tel. 075 519 4332

3. Cavite : Mr. Manuelito de Castro

Carmelite's Pharmacy 195 Sol P. Bella St. Imus, Cavite Tel. 045 471 1453

4. Iloilo-Guimaras : Ms. Nancy Chua (OIC)

Drugstation Inc. Valeria, Extension

Iloilo City

Tel. 033 337 0208

5. Cebu : Mr. Winston David Sy.

Ever Care Pharmacy

Hi-Way Tipoo, Mandaue City

Tel. 032 345 2505

6. Cagayan de Oro, Misamis Or,. : Mrs. Vilma Vacalares

Farmacia Vilma

017 S. Vacaresst, Opol, Mis. Or.

Tel. 08822 754 607

7. Davao : Mr. Roger cotes

Tri- Kym Distributors

7 Tulip Bldg, Aala Cupid, Inc. Macarthur Hi-way, Matina,

Davao City

Tel. 082 299 1818

Annex 12

OBSERVED TB TREATMENT PROVIDER OF CHOICE

Action taken by TB Symptomatics with bacteriologically confirmed TB

	Percent (%)
None	34.5
Self Medication	22.4
Family Member	1.7
Traditional Healer	3.4
Health Center	15.5
Public Hospital	9.8
Private MD	10.4
Private Hospital	3.3
TOTAL	100.0

Source: 1997 NTPS

Two surveys suggest that private care is the choice of about 1/3 of patients (31.5% I the UNHP study and 38.3% in the NTPS study, which used bacteriologically confirmed diagnoses. The majority of the time (59%) costs, either monetary or temporal were the primary reason for choosing a provider.

^{*} Hospital provided treatment is broken by public-private using 2001 UHNP

II. REVISIONS TO IMPLEMENTATION PLAN¹⁰

A. Background

Prior surveys have revealed potentially dangerous patterns of health seeking behavior among tuberculosis (TB) patients. According to these surveys as much as 33% did not seek medical care and more than 25% resorted to self-treatment. Other reports revealed that as much as 85% of individuals who seek TB treatment in the private sector go straight to pharmacies for their therapeutic needs.

As the first point of contact for the self-medicating TB client as well as the obvious source of drugs for the TB client in the private sector, pharmacies can and should play strategic role in the enhancement of TB treatment using the DOTS strategy in the private sector.

Because of these reasons, the Pharmacy-based TB DOTS Implementation plan was developed by Philippine TIPS in order to expand the delivery of DOTS services in the private sector.

This document will discuss various revisions to the original plan set forth as a result of the meeting between USAID, Philippine TIPS Pharmacy Team, and Chemonics International on 18 November 2003.

B. Strategies for Pharmacy Involvement in TB Control Efforts (section 5 Implementation Plan)

The primary model or approach for the pharmacy in this initiative would involve:

1. Dissemination of TB information

Tuberculosis information to pharmacy clients will be disseminated through the distribution of IEC materials (brochures, flyers, posters, etc.) developed in conjunction with the pharmacy initiative.

2. Screening and Information-giving

Pharmacists and all those to be trained as part of this program will be given the skills for basic health screening regarding pulmonary tuberculosis. Screening tools or algorithms will be developed for this purpose and for use by participating pharmacies that will be trained in the use of these tools. These skills are by no means designed to replace thorough and proper medical evaluation which will only take place in DOTS clinics conducted by a trained DOTS physician.

This program likewise aims to enhance and develop the information-giving skills of pharmacists and pharmacy assistants regarding TB treatment, side effects of TB chemotherapy, and drug interactions.

Screening and information-giving shall be proscribed from a strict set of standards. Deviation from the set standards will be discouraged.

3. Referrals

Clients suspected to have pulmonary tuberculosis will be referred by the trained pharmacist / assistants to a designated DOTS center for evaluation and follow-up.

¹⁰ Prepared by Alfred Lardizabal, MD, New Jersey Medical School National TB Center. Released 9 December 2003.

Pharmacies will not be allocated a management fee. However, as this program evolves, a reimbursement scheme may be developed if the pharmacy becomes a part of the established DOTS network linked up with the DOTS center. Reimbursement to the pharmacy for referrals within a DOTS system may be considered as part of the Philhealth TB-OPD Package. The proposed reimbursement amount for referrals of a diagnosed case is estimated at PHP 100.

This initiative will be piloted in seven sites: (Quezon City, Cavite, Dagupan, Cebu, Iloilo, Cagayan de Oro, and Davao)

4. The Pharmacy DOT center

Development of specific pharmacies as centers for directly observed therapy (DOT) and other innovative strategies will be considered and pursued further as the pharmacy plan unfolds.

C. Training Program for Pharmacists and assistants

- 1. The training program shall seek to emphasize to the pharmacists and staff that TB drugs should not be dispensed without a prescription. The exception would be in the case of a known patient in an ongoing treatment coming for a refill.
- 2. The training program will emphasize the principles of TB DOTS. Anti-TB therapy is not to be modified without the direction of a DOTS physician.
- 3. TB can not be symptomatically managed by pharmacists.
- 4. Pharmacists, pharmacy assistants, clerks, and all those who dispense TB medications should be trained in basic TB symptomatology, therapy, referrals, and the DOTS process. For inclusion into this program, participating pharmacies must have their staff trained on the specified areas mentioned above.

D. IEC

The IEC developed concurrently will be a major component of the Pharmacy Initiative.

E. Organization and Management

- 1. A program manager will provide strategic leadership for the day-to-day operations of the project. The program manager will be assigned one staff assistant.
- 2. Three field coordinators (1 Luzon, 1 Visayas, 1 Mindanao) will be hired to facilitate, coordinate, and monitor the implementation of the pharmacy initiative in the seven implementation sites.

NGO's

- 3. In the initial implementation plan, NGO's were envisioned as the implementing and monitoring arm for this project, providing technical support to designated pharmacies in their respective catchment areas. In the revised plan, NGO's will not be a part of the pharmacy program.
- 4. In lieu of NGO's, outreach/field workers will be incorporated into this DOTS model. These outreach workers will use the DOTS center as their base. They will work with pharmacies to

continually upgrade their information, provide IEC materials, serve as a link between the pharmacy and the DOTS center, and monitor the effectiveness of the pharmacy program. Philippine TIPS field coordinators will work closely with the outreach workers and report directly to the project's program manager.

Outreach worker may be social workers, midwives, barangay health workers, or public health nurses who will undergo a stringent training program developed by Philippine TIPS.

F. Monitoring and Evaluation

1. Monitoring will be conducted by the outreach workers on a weekly basis. Evaluation will be completed by a baseline survey and follow-up. This process will ascertain the effectiveness of both the IEC materials and training.

G. Further Considerations

- 1. Engage in discussions with the MSH project to encourage LGU's to guarantee credit or establish a voucher system for designated pharmacies to provide a full course of TB treatment for patients unable to pay.
- 2. Encourage larger pharmacy chains such as Mercury, Watson's, and Rose to become involved in this project.
- 3. Meet with the GDF to determine who will distribute TB drugs. The goal is to obtain free drugs for selected pharmacies to act as distributors of these drugs linked with a private physician for diagnosis and follow-up. This would create a quasi-DOTS model.
- 4. Research on the possibility of making generic drugs in the mid-price range available in these pharmacies.

III.THE PHARMACY DOTS MODEL: AN EVALUATION¹¹

A. Executive Summary

The Pharmacy DOTS Initiative (PDI) was formally launched in April of 2004. Its primary aim is to engage local pharmacies in facilitating the expansion of quality TB services through referrals to DOTS clinics of potential TB cases and discouraging the dispensing of anti-TB drugs without prescription. Initial PDI efforts focused on strategic advocacy campaigns at both national and local levels resulting in strong endorsements of PDI by two of the largest pharmacy groups in the country: the Philippine Pharmaceutical Association (PPhA) and the Drugstores Association of the Philippines (DSAP). Another major outcome of the campaign was the successful solicitation of formal support from the three largest pharmacy chains in the country: Mercury Drug Corporation, Watsons Personal Care Stores (Philippines), and Rose Pharmacy, Inc. Institutional partnerships were also reinforced with the Department of Health, the local government units, the Philippine Coalition against Tuberculosis (PhilCAT) and the local TB coalitions.

At the local level, Memoranda of Understanding (MOU) were signed with owners of the 20-25 participating pharmacies from each of the 7 pilot sites of Cagayan De Oro, Cebu, Dagupan, Davao, Iloilo, Quezon City and the municipality of Bacoor, Cavite. The agreement included attendance of pharmacy personnel to the PDI training sessions, the conduct of all PDI interventions, and cooperation with Philippine TIPS-PDI monitoring activities All recognized DOTS units (public and private-public mix DOTS or PPMD) likewise signed an MOU with Philippine TIPS recognizing these pharmacies as potential sources of TB referrals.

This report assesses how PDI enhanced the quality of TB dispensing practices among pharmacy staff as based on observations of (1) prescreening of clients inquiring about TB drugs, (2) giving TB information, (3) distribution of PDI-DOTS IEC materials and (4) client referral to DOTS facilities. Pharmacy staff were also assessed if they offered adherence monitoring to clients with prescriptions who opted to buy drugs on a "per piece" basis, and their compliance with the "No Prescription, No anti-TB Drugs" policy. Quantitative and qualitative analysis were based on results from the recently conducted Mystery Shopper (MS) Study and from Field Monitoring Reports covering the period of July to December 2004.

A total of 1,170 pharmacy and DOTS clinic personnel were trained on the different components of the PDI intervention by end of August 2004. It is interesting to note that a significant percent (89%) of the pharmacy personnel actually have high levels (with some college degrees) of education.

Achievements of the project at enhancing TB case detection are illustrated by the fact that a total of 3,979 PDI TB-related clients were served by PDI pharmacies between July and December 2004. PDI pharmacies referred 1,550 (39% of total) of its TB-related clients to DOTS units, 575 (37% of total referred) of which accessed a DOTS facility. Majority (78%) accessed public DOTS facilities, preferred by clients for their relative accessibility as there are considerably more public units than public private mix (PPM) DOTS units linked to PDI pharmacies in all 7 sites.

Of the PDI referrals that actually accessed DOTS, 85% were verified as TB symptomatic (including self-administered treatment [SAT]) by the receiving DOTS units. Thirty-five (35% of those confirmed symptomatics) of the same were diagnosed at the DOTS units as pulmonary TB cases. Majority (97% of those diagnosed TB) was subsequently enrolled to the DOTS program.

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¹¹ Prepared for the Philippine TIPS project by Ruth B. Aseron. Released February 2005.

A Mystery Shopper Study conducted in December 2004 noted significant differences in dispensing practices of PDI participating pharmacies relative to observations on TB dispensing behavior of non-PDI pharmacies.

One of the more significant findings of the study was the consistently higher percent of PDI pharmacies who complied to the "no prescription, no dispensing" policy. The level of compliance ranged from 70% to 100% among the PDI pharmacy, compared to a range of 10% to 80% among non-PDI pharmacies.

PDI-trained pharmacy personnel will more likely conduct pre-screening of TB suspects than those who were not trained by PDI. "Prescreening" consists of (a) asking the buyer if she/he has carrying a prescription, (b) if he/she is buying the drug for him/herself for someone else, and (c) asking about symptoms. Sixty-two percent (62%) of PDI pharmacies conducted pre-screening on their mystery shoppers compared to only 15% among non-PDI pharmacies.

Similarly important to eliciting relevant information from the TB-related client is providing them with accurate TB information. The study found that 56% of observed PDI pharmacies provided TB information, whereas, merely 6% of the non-PDI pharmacies shared TB information to the mystery shoppers. Most frequently disclosed were information such as the need to consult a physician; the availability of free medicines for diagnosed TB cases at the DOTS center and the most accessible DOTS units for the client.

The MS study also showed that despite the management teams' diligent provision of IEC materials to the PDI pharmacies, only 30% were found to be distributing these materials.

It was expected that all of the mystery shoppers, even those *with prescriptions*, be offered referrals to DOTS centers given that they intended to purchase relatively small dosages of drugs and are not sure if they can continue to buy their anti-TB drugs in order to complete their treatment regimen. However, the study showed that only 31% of 140 mystery shopper transactions were referred to DOTS centers. There remains an evident need for PDI pharmacies to improve on this particular activity given that this is a major quality component in assessing their TB dispensing practices

The numbers of recorded clients who were referred (1,550), accessed the DOTS Centers (575) and were enrolled (164) are some of the significant contributions of the PDI. Given merely 6 months of implementation, These figures are significant From July to December of 2004, confirmed TB cases among PDI referrals constitute 8% of TB cases accounted in the participating DOTS Centers across the 7 sites.

Despite the impressive accomplishments of pilot pharmacies in the areas of improving pharmacy practices regarding dispensing of drugs and information giving, there were noted a few weak areas. These include inconsistent adherence monitoring, the non-distribution of IEC materials, and the inadequacy of a record-keeping system. These are areas needing further strengthening which could be incorporated in subsequent training and on-site coaching.

B. Introduction

In line with the goal of reducing TB prevalence in the country through increased private sector involvement, the Philippine Tuberculosis Initiative for the Private Sector (Philippine TIPS) was organized in October 2002. The Philippine TIPS is a project managed by a consortium led by Chemonics International, Inc., a global consulting firm promoting economic growth and higher living standards in developing countries. Consortium members include the Philippine Coalition against Tuberculosis

(PhilCAT), the Philippine Business for Social Progress (PBSP), CAMRIS International, and the New Jersey Medical School National TB Center (NTBC). The American people through the US Agency provide financial support for International Development. The goal of Philippine TIPS is to contribute to national efforts to control TB by "strengthening private sector participation in TB DOTS service delivery".

In the Philippines, as much as 85% of people who seek TB treatment in the private sector directly approach drugstores for their therapeutic needs. For the 24% of TB symptomatics who self-medicate, the drugstore is among their first points of contact for TB information and drugs. Thus, through a Pharmacy DOTS Initiative (PDI) project designed by Philippine TIPS, pharmacies are being engaged as private sector stakeholders to promote DOTS. Pharmacy personnel are trained to discourage the practice of TB self-medication, support the "no prescription no dispensing of TB drug" policy of government and carry out referrals of drugstore clients with clear TB-related symptoms to DOTS centers. This initiative also aimed to increase knowledge of pharmacy clients about DOTS and improve case detection through a referral system established with the DOTS centers.

C. The Pharmacy DOTS Project Implementation

The project first launched a strong program of advocacy and networking with major stakeholders. This phase of the project consisted of message crafting exercises and IEC development, public lectures and workshops, one-one one meetings with stakeholders. Stakeholders come from the pharmacy associations, drugstore owners associations, including large national pharmacy chains, the Department of Health, the Bureau of Food and Drug, local TB coalitions, local government health officials and other national and local TB stakeholders.

Philippine TIPS engaged the New Jersey Medical School National Tuberculosis Center as its partner in the design of the *PDI training modules*. The training of 17 Master Trainers followed its development from the seven pilot sites. The trainers were composed of local TB influentials, stakeholders, and allies who also facilitated relative ease of entry of the PDI project in the pilot sites. They were to serve as resource persons and/or facilitators for the local training of pharmacists, pharmacy assistants, and DOTS personnel.

Armed with strong endorsements from both the public health groups, and pharmacy groups, the project began a series of two-day training workshops for pharmacy personnel in seven pilot cities throughout the country between June 19-August 31, 2004. The seven (7) PDI pilot sites average 6 batches of training sessions attended by approximately 20 to 30 participants. A total of 1,170 pharmacy personnel were trained in PDI with an average of 25 pharmacies in each of the seven pilot cities signing a memo of understanding with Philippine TIPS to participate in the project. Figure 1 shows the distribution per site of trained PDI personnel.

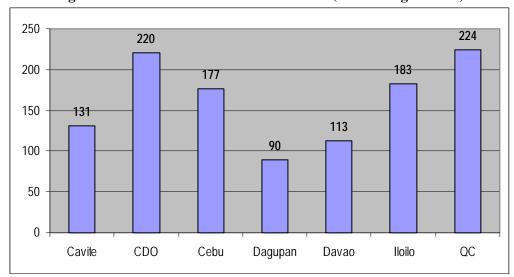


Figure 1. Certified PDI Trainees PER SITE (June – August 2004)

The graph indicates that Quezon City has the most certified PDI trainees (224) closely followed by Cagayan De Oro City (220). Key factors to high level of participation are the conscientious conduct of advocacy and linkaging activities and the favorable level of support invested by local stakeholders.

In contrast, PDI-Dagupan completed the training of only 90 participants partly due to the relative delay in the commencement of its training activities. It was not until the middle of July that PDI trainings were initiated in the city–almost a month following its counterparts. In spite of the low trainee turnout, Dagupan was not impeded from launching PDI by early August, soon after the other 6 PDI sites.

Figure 2 shows the composition of the trainees in terms of their position within the pharmacy set-up.

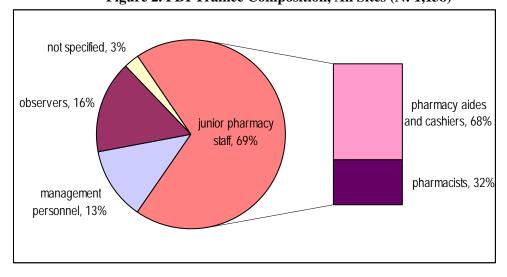


Figure 2. PDI Trainee Composition, All Sites (N: 1,138)

Certified PDI trainees are comprised mainly of junior pharmacy staff at a total of 783 (69% of total). Of these, 249 were pharmacists (32%) and 534 were pharmacy assistants or cashiers (68%). Management pharmacy personnel (i.e. 143 managers, supervisors, owners) were also a key group of participants comprising 13% of the total trainees whereas 19% were consisted by DOTS personnel and other key NTP players.

Data profiles of trainees reveal that 89% are college degree holders or higher. ¹² This is an interesting finding that bode well for the capacity of drugstore personnel to absorb inputs during PDI training and adherence to prescribed PDI tasks.

The PDI project through its training program taught pharmacy personnel to give information and distribute IEC materials to clients who come to the drugstores asking for TB drugs, with and without prescription. They are encouraged not to dispense TB drugs without prescription and discourage the practice of self-medication in the messages they convey to their clients. They are taught to pre-screen clients to determine if they are eligible or not for referral to DOTS units in the area closest to them. The client is asked if s/he holds a prescription or not. If not, s/he is entered in the client list, and the pharmacy personnel is made to understand that her/his action is NOT to give drugs. A series of information giving, pre-screening and ultimately referral will be offered to the client. If the client holds a valid prescription, s/he is then asked if s/he is aware that it is a TB drug that she is buying, and the procedure used for the diagnosis. Symptoms are asked, and for whom the drugs are intended to determine if they are the patients themselves or simply buying for someone else.

For clients with prescription and buying only a portion of the TB drug prescribed, pharmacists are encouraged to offer adherence monitoring or even suggest to clients to go to the DOTS center if they think they are unable to buy the whole course of the TB medication. Adherence monitoring involves offering to follow-up the patient with prescription to remind them when the medicines that they bought need to be refilled. This way, they address the problem of interruption of treatment among those who prefer to buy their anti-TB drugs. Cough of more than two weeks is an indication for the pharmacy personnel to issue a referral form to the client to a particular DOTS center if s/he agrees to be referred.

D. The PDI Evaluation Study

This part of the report deals with the project evaluation which analysis of the effectiveness and the efficiency of the PDI project in the achievement of its set goals and objectives after six months of field implementation. This study aims to evaluate how well the pharmacy tasks have been performed by PDI trained pharmacy personnel, identify gaps in implementation and identify key components of the intervention that have been successful in achieving better results.

Methodology

This report incorporates field data and information provided by each of the seven (7) Site Managers and their Field Workers in their regular conduct of monitoring the monthly performance of the pilot pharmacies. These were supplemented by field reports, which contain qualitative insights and observations on PDI operations at the local level.

In addition, a Mystery Shopper Study was conducted to objectively observe personnel as they deal with two groups of cases of shoppers: one carrying a valid prescription, and another group has no prescription but wish to buy particular brands of anti-TB drugs. Pharmacy personnel were observed and rated whether they performed the following tasks and how accurately these were done:

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¹² PDI Trainees Profile, n:1,138.

- Eliciting Client Information: Pre-screening
- Information Giving
- IEC Materials Distribution
- PDI Customer Referral to DOTS Facilities
- Offering Adherence monitoring
- Implementation of the "No Rx, No anti-TB Drugs" Policy

The mystery shoppers were highly trained in the PDI intervention (they were PDI site managers and field workers assigned in another city) disguised to purchase drugs for anti-TB from PDI and non-PDI pharmacies. The sample consists of ten randomly chosen PDI drugstores from each of the seven sites and 10 non-PDI pharmacies. Matching as based on size of business (national chain or retail pharmacy), location, and manpower and estimated customer traffic.

A total of twenty (20) pharmacies in each of the seven (7) sites were involved in the activity. The pharmacies were subjected to two (2) observation scenarios: mystery shopper *with prescription* and mystery shopper *without prescription*. In effect, there were a total of 280 observations across all the seven pilot sites.

Mystery shoppers with prescriptions were made to pretend that they wished to purchase only 3 of 180 pieces of Myrin-P Forte; it was their first time to buy the drug; they have been coughing for a month; they were diagnosed through x-ray, and that they had no knowledge of DOTS if asked. Shoppers without a prescription were to indicate that they wished to buy 2 tablets of Odinah as advised by a neighbor; they were to try to purchase a substitute drug should Odinah be unavailable; they were unaware that Odinah was an anti-TB drug; they have been coughing for about a month, and, that it was their first time to take the drug.

Each team conducted the study in an average of 3 days. They were instructed to fill out the mystery shopper protocol immediately after the end of each transaction in the nearest place away from the recently visited pharmacy. They then processed the results, and forwarded their reports to the PDI Central Office. While there were initial analyses of the quantitative data at the local level, a more exhaustive processing of data was assumed by PDI Central Management. The *Stata Statistical Software* was utilized for quantitative analysis whereas local qualitative information was extracted from site reports primarily to enhance assessment.

Scope and Limitations of the Study

This report focuses on PDI project outcomes as implemented in the six (6) cities of Cagayan De Oro, Cebu, Dagupan, Davao, Iloilo, Quezon City and the municipality of Bacoor, Cavite¹³. This spans a period of approximately twelve (12) months since the project's inception in January 2004, although actual PDI implementation of tasks did not formally begin until July 2004. Focus shall be given on the outcomes of the PDI capability building interventions on PDI pharmacies, more particularly, the quality of their anti-TB drug dispensing practices. The report will likewise present the contributions of PDI to TB Case identification in its participating localities.

The usual limitations to studies of this nature apply in this activity, although in this case the high level of training of the mystery shoppers has minimized these. Because of the importance of avoiding suspicion by the PDI personnel, the shoppers could not exhaustively explore other aspects of behavior, such as whether the transactions were properly and consistently done, and so on. In addition, the results of any

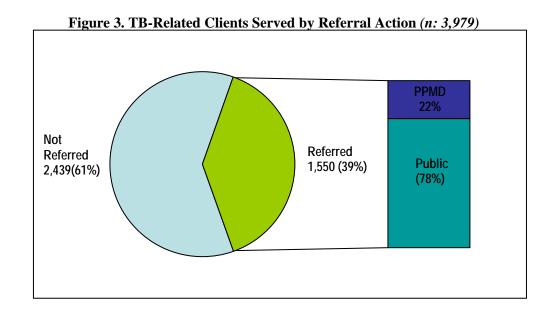
¹³ Some PDI-Cavite pharmacies are also located in the neighboring municipalities of Imus and Dasmariñas.

action on the part of PDI personnel on the TB knowledge and attitudes of clients who were recipients of information being given cannot be determined.

E. Evaluation Results

Contribution to Case Detection: Results obtained from Performance Monitoring Data

Overall, a total of 3,979 TB-related clients were served and recorded by PDI pharmacy personnel for the period of July to December 2004. A significant majority (66%) of these were recorded as clients *with prescription*. PDI pharmacies sold anti-TB drugs to 58% of recorded PDI clients¹⁴. Many of these clients hold prescriptions. Thirty nine percent were referred by PDI pharmacies to the DOTS facility most accessible to them. This group includes those who do not have a prescription (mostly self-medicating) as well as those who may hold a prescription and purchased drugs from the pharmacy, but indicated that they want to avail of free drugs from the DOTS centers. (See Figure 3)



As Figure 3 shows, a majority of clients were not referred mainly because they have prescriptions, and do not wish to be referred but opted to buy their medicines from the drugstores. In all, 1,550 TB-related clients were referred by PDI-trained pharmacies.

When data are broken down by site, Quezon city, registered the most clients served, followed by Cebu city, which is understandable because of sheer size of the population served. A closer look at the data revealed that in the case of Quezon City, this was explained by the high proportion of clients (79%) coming with prescriptions. Cebu topped the list of number of clients referred; however, relative to clients served, Iloilo performed the highest of the seven sites.

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¹⁴ Refer to Appendix 3: Sub-Indicators

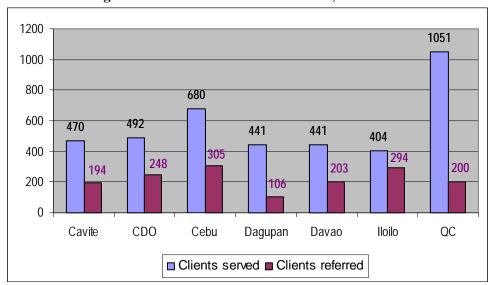


Figure 4. Clients Served and Referred, PER SITE

Other factors that influence clients' decision on referral and access of DOTS include the following: (1) patient's capacity to purchase TB medication (2) perceived inconvenience of going to DOTS facilities (3) patient already under treatment or about to complete TB medication (4) perceived unavailability of medicines at the health center, and (5) patient's preference for therapy under his own private physician.

All the sites encountered problems with low performance¹⁵ of its pharmacies during its first months of implementation. A major factor mentioned by site managers is the low level of confidence among trained pharmacy personnel in performing the PDI tasks. This was corrected by the designation of a PDI point person per pharmacy, usually the pharmacist, to serve as a "coach" on duty. A noticeable increase in pharmacy referrals was subsequently observed across all the sites.

Across sites, a significant majority (78%) of TB-related clients opted to be referred to *a public* DOTS facility where services are expected to be free. Public DOTS facilities are also chosen by clients for their relative accessibility, which is stated in the PDI Guidelines as the primary basis of PDI referrals. But perhaps a major reason is the sheer number of public DOTS units which outnumber the PPM DOTS centers (183:20) linked to PDI pharmacies in all 7 sites.

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¹⁵ A pharmacy is assessed as non-performing when it has issued **no referrals** within a certain evaluation period.

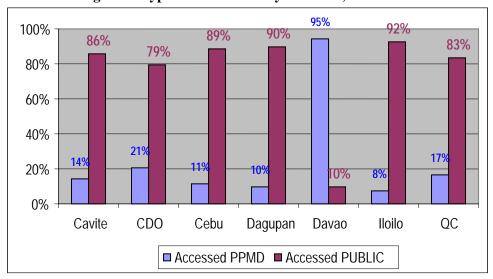


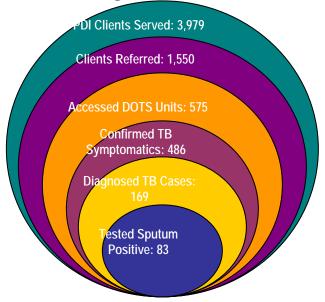
Figure 5. Type of DOTS Facility Accessed, PER SITE

Greater utilization of public DOTS facilities is consistent among all sites with the exception of PDI-Davao (Figure 5). The case of Davao is unique in that there was an understanding formed between the City Health Office and among PDI pharmacies that the publicly initiated PPMD-Davao Chest Center (DCC) be the center for referrals intended for public health centers within Davao City. This was a local arrangement that was made to facilitate a more centralized and efficient management of TB referral cases in the public health system.

Access to DOTS units by PDI referrals was partly facilitated by follow-up of patients who have yet to act on their referral and prompting them to immediately access DOTS facilities, both of which are programmed into the activities of the site management teams. If clients are not reached through phone calls, then house visits are conducted. Records show that in only 6 months into its implementation each the local PDI sites have aided *access* to DOTS by as much as 27 to 58 percent of its referred clients. Unfortunately this type of follow up is not done consistently across all sites because of the bulk of monitoring activities imposed on the limited manpower in the PDI management team.

Collectively, 37% of those referred were traced as having accessed DOTS facilities. This was done through diligent inspection of DOTS center's records. Of those who accessed the DOTS facilities, 85% were verified as TB symptomatics. Furthermore, 29% of those that accessed were diagnosed as pulmonary TB cases with 49% having been tested sputum positive (+). Ninety-seven percent (97%) verified TB cases subsequently enrolled to standardized treatment or DOTS (See Figure 6). These high rates of performance are indicative of the success of pre-screening as well as information giving at the pharmacy level.

Figure 6. Breakdown of PDI Clients Served, ACROSS SITES



The efficacy and gains of PDI referrals is further highlighted by the 8% contribution of the PDI to total TB cases registered in all its participating DOTS units. This shows that of the 2,022 total TB cases registered in PDI DOTS units (public and private) 169 were referrals from PDI pharmacies. Just as noteworthy is the 17% (83/486) positivity rate¹⁶ found for these TB cases in 6 months. For the same period, PDI additionality¹⁷ is recorded to be 2% (83) of the estimated 4,667 total smear positive cases among the PDI catchment population¹⁸.

It must be noted, however, that most of the customers who are issued referrals by the pharmacies often access the DOTS centers at a much later date. This was observed that there was actually some lag period before some PDI-referred clients accessed the DOTS centers. If this is a pattern, an estimated 975 PDI clients who were given referrals have yet to access the DOTS centers. Reasons for this late access of referred clients of DOTS facilities remain to be determined.

Quality of TB Drug Dispensing Practices: Findings from the Mystery Shopper Study

The Mystery Shopper Study conducted in December 2004 aimed to assess the gains of the project in terms of the quality of drug dispensing patterns across all the seven pilot sites. More particularly, PDI-trained pharmacy personnel were comparatively assessed based on the PDI component activities of *prescreening, information giving, IEC materials distribution, records-keeping and adherence monitoring* (if anti-TB drugs were sold to the client), supposedly performed prior to referral.

The anti-TB drug dispensing practices of 10 randomly selected local PDI-trained pharmacies was weighed against observed practices of 10 non-participating pharmacies. Non-PDI pharmacies served as the study's CONTROL GROUP. Each pharmacy was subjected to two scenarios portrayed by the mystery shoppers: TB symptomatic WITH PRESCRIPTION and TB symptomatic WITHOUT

¹⁶ Positivity Rate is operationally defined as the percentage of sputum smear positive cases among confirmed TB symptomatics.

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¹⁷ PDI Additionality notes the degree of the project's contribution to smear positive cases as determined by dividing PDI smear positive cases by the **estimated smear positive cases** for the period. DOH estimates smear positive cases to be 145 per 100,000 population annually.

¹⁸ Total Catchment population of PDI amounts to 6,437,071 across the 7 sites (2004 Projections, NSO).

PRESCRIPTION. PDI pharmacies were expected to refer 100% of its shoppers, regardless of the scenario.

Adherence to the "No Rx, No anti-TB Drugs" Policy

A major objective of PDI is to reduce TB self-medication and its consequences. Ensuring adherence to the "no Rx, no anti-TB dugs" policy among pharmacists and pharmacy aides is one the most effective ways to achieve this. Results from the study shows that when a client holds a prescription, he/she is most likely to be sold the anti-TB drugs, even when he/she intends to purchase small dosages of the drugs prescribed. In fact, 74% of PDI pharmacies sold anti-TB drugs to mystery shoppers with prescription. Statistical analyses showed that there is *no significant difference* between the performances of PDI-trained pharmacies to non-PDI pharmacies regarding sale of anti-TB drugs when a client holds a prescription. In the PDI training, however, it was emphasized that when a client with prescription insists to buy the drug, he/she must not be refused. What is recommended is that when clients indicate intentions to purchase relatively small dosages of anti-TB drugs than recommended despite prescription and they indicate that they may not be able to afford to buy the whole treatment regimen, the option of referral to the DOTS centers should be presented to them. This has not been the practice of the pharmacy, personnel, however. Hence, increased effort is required to reiterate among trained pharmacy personnel their role in the promotion of DOTS and the public benefits of steadfast adherence to proper TB medication and adequate treatment.

An encouraging result is found with regard to handling of clients without prescription. A substantial majority (87%) of the 70 PDI drugstores subjected to a *no-prescription scenario* refused sale of anti-TB drugs (Figure 7). In contrast, only 35% of non-PDI pharmacies refused the dispensing of drugs to shoppers *without a prescription*.

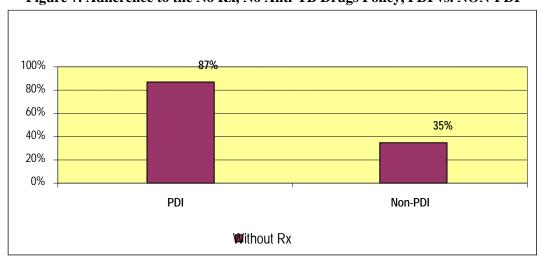


Figure 7. Adherence to the No Rx, No Anti-TB Drugs Policy, PDI vs. NON-PDI

The encouraging degree of adherence to the *No Prescription Policy* is consistent in each of the 7 PDI pilot sites. The level of implementation of the Policy ranges from 70 to 100 percent of observed PDI pharmacies (Figure 8). Best performers are PDI Cebu, Cagayan De Oro and Iloilo where mystery shoppers report that all such transaction were refused sale of anti-TB drugs.

100 100 80 100 100 80 80 80 70 Percentage (%) 60 40 20 0 CAV CDO CEB DAG DVO ILO QC

Figure 8. Adherence to the No Rx, No Drug Dispensing Policy, PER SITE

Pre-Screening: Eliciting Client Information

Pre-screening facilitates the identification by pharmacy personnel of individuals who are candidates for referral to DOTS centers and needing TB information. PDI pharmacies have been trained to elicit information from TB-related clients regardless of whether or not a prescription has been presented. This is to determine his and the client's best course of action.

Mystery Shopper results show that PDI-trained pharmacy personnel were more likely to conduct prescreening of TB suspects than those who were not trained by PDI (Figure 9). Sixty-two percent (62%) of PDI pharmacies conducted pre-screening on their mystery shoppers whereas 85% of non-PDI pharmacies were remiss in this regard.

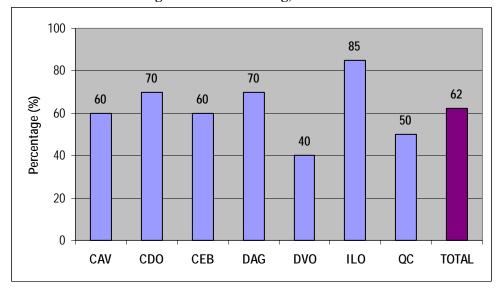


Figure 9. Pre-screening, PER SITE

The highest incidence of pre-screening was among the observed PDI pharmacies in Iloilo, recorded at 85%. Lowest was PDI-Davao where pre-screenings were conducted by only 40% of the observed PDI pharmacies.

Pre-screening was observed to remarkably lengthen transaction time for those pharmacies that perform it. While ordinary transactions might average 3.5 minutes, pre-screening significantly prolongs this to a recorded average of 11 minutes.¹⁹ This could possibly impede other pharmacies from performing this task. Other compounding factors commonly cited by site managers are high customer volume, inadequacy of pharmacy staff managing TB transactions and the high turnover of PDI-trained pharmacy personnel.

The most common TB-related client information sought by PDI pharmacy personnel are (1) possession of a prescription, (2) for whom the anti-TB drugs are intended and (3) what symptoms was the client experiencing. (Figure 10) There is a subsequent indication that PDI pharmacies are more inclined to validate the drug prescriptions of its clients.

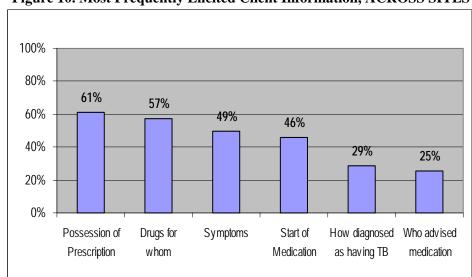


Figure 10. Most Frequently Elicited Client Information, ACROSS SITES

Information Giving: Client Counseling

Similarly important to eliciting relevant information from the client is *providing* TB-related clients with pertinent TB information. By giving information, pharmacy personnel hope to influence patients to seek early and appropriate treatment.

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¹⁹ This possibly incorporates time invested for other tasks under PDI.

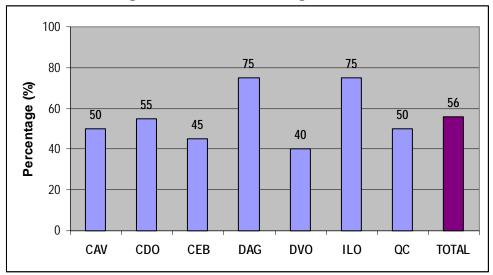


Figure 11. Information Giving, PER SITE

The study found that 56% of observed PDI pharmacies provided TB information to the shoppers, whereas, merely 6% of the non-PDI pharmacies shared TB information (Figure 11). Highest accounts of Information-giving were done by Iloilo pharmacies, equaled by Dagupan at 75%. Lowest was among observed PDI pharmacies in Davao (40%).

The most frequently disclosed information relevant to TB are: the need to consult a physician; the availability of free medicines for TB cases at the health center; the most accessible DOTS units for the client; a two-week cough as a symptom of TB, and the fundamentals of DOTS (Figure 12). The PDI pharmacy staff with considerably high levels of accuracy stated all these information. Least stated were duration of treatment, catchment area of DOTS facilities, and failure of treatment by monotherapy. Information on *catchment area* and *monotherapy cure* both recorded the least levels of accuracy. This illustrates that members of the PDI pharmacy staff are unlikely to prioritize giving information, which they are least confident in disclosing.

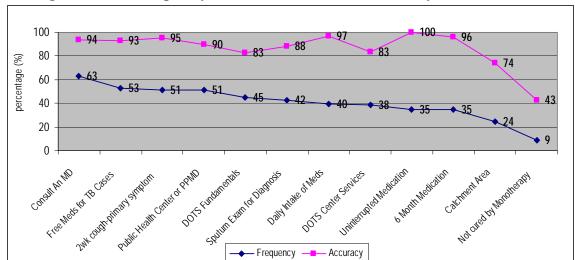


Figure 12. Most Frequently Stated TB Information & Accuracy, ACROSS SITES

Nearly half (44%) of PDI trained pharmacies did not provide information at all, but among those that did, 22% cited 7 or more TB facts. A definition of information COMPLETENESS as used by this study is presented in the table below.

COMPLETENESS OF TB INFORMATION GIVEN				
	F	%		
None	71	50.7		
Low (1-3)	26	18.6		
Medium (4-6)	13	9.3		
High (7 above)	30	21.4		
	140	100		

Distribution of PDI IEC Materials

Pre-screening represents a proactive attempt to acquire important client information for TB case detection and subsequent referral. The pharmacy transaction culminates in PDI staff distributing TB IEC materials. This fulfills the PDI pharmacy staffs' role as TB information givers, confidantes and educators. However, Mystery Shopper data reveal that despite the management teams' diligent provision of IEC materials to the PDI pharmacies, only 29% were found to actually distribute them (Figure 13).

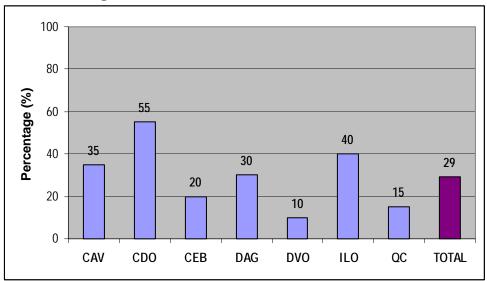


Figure 13. IEC Materials Distribution, PER SITE

There are wide variations among the pilot sites on performance of the task of IEC distribution. Site performance levels range from 10 to 55 percent. Lowest materials distribution was among observed PDI pharmacies in Davao (10%), closely followed by those in Quezon City (15%). Cagayan De Oro listed the highest proportion of observed PDI-trained pharmacies that distributed IEC materials (55%).

The sizeable investment by Philippine TIPS in the development and production of the materials substantiates a need for further research into the reasons behind its low utilization. IEC distribution is the least difficult PDI task to perform. The results therefore raise questions on the reasons for non-utilization of these materials by the pharmacies.

Referral: Facilitating access to DOTS Centers

As stated earlier, the mystery shopper scenarios were structured to result in an offering referral to 100% of transactions with mystery shoppers. The expectation is for PDI trained pharmacies to discourage "tingi" or "per piece" purchasing of anti-TB medicines and to advise clients suspected of TB to seek proper diagnosis and medication from DOTS Centers. When customers do not carry a prescription, they are encouraged to seek doctor's consultation or be referred to a DOTS facility for proper diagnosis and subsequent treatment.

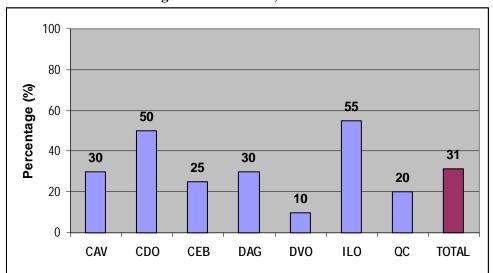


Figure 14. Referrals, PER SITE

According to the MS Study results, PDI pharmacy staff advised 31% of 140 mystery shopper transactions to be referred to DOTS units. In contrast, only 1% of the 140 mystery shoppers served by non-PDI pharmacies were referred to DOTS units. PDI-Davao particularly posted the lowest rate of referral (10%) among the 7 sites. Regardless of sites, however, there is a need for PDI pharmacies to improve on this particular activity especially since *proper referral* is at the crux of this intervention. However, a referral process has clearly started and is now beginning to be institutionalized, although there is definitely more room for improvement in this regard.

Offering Adherence follow-up/monitoring

As a mechanism to improve adherence to treatment regimen for those who choose to purchase their drugs with or without the benefit of supervised treatment, PDI pharmacies have been encouraged to actively follow-up patients to remind them when it is time to purchase a refill through phone calls or text messaging. At the very least, these patients are assisted to make sure they do not interrupt their treatment. This idea was also marketed to the pharmacy sector as an opportunity to get sales from this group of patients that want to buy their own drugs. As Figure 15 shows the results are not consistent. It is obvious that this task demands more time and effort from the pharmacy personnel. An average of P6, 000 to 8,000 in sales could be generated if the e pharmacy staff is successful in influencing the client to come back and refill their prescription to complete the course of their TB medication. Perhaps marketing this idea to owners may improve performance in this regard.

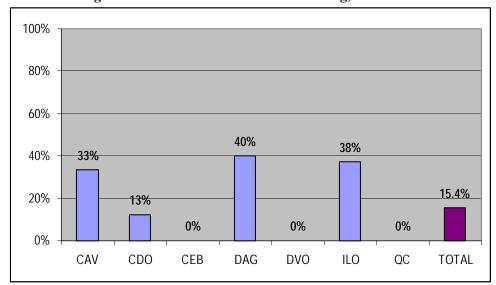


Figure 15. Offered Adherence Monitoring, PER SITE

PDI-Dagupan was particularly commendable in this component activity as 40% of its pharmacies were observed to have offered adherence monitoring. Closely following are PDI-Iloilo at 28% and Cavite at 33%. While PDI-CDO posted relatively modest gains in this regard (13%), PDI-Cebu, Davao and Quezon City were observed to fail to perform this particular task.

Record Keeping

Record keeping is important mainly to be able to track down the performance of pharmacies in regard to the PDI tasks. It is also beneficial to the pharmacy if they intend to undertake adherence follow-up, since the records can remind them of patients needing such reminders. However, mystery shoppers report that only 41% of transactions were recorded by PDI pharmacies. Since this is a task that cannot be expected of non-PDI pharmacies, it is no surprise that PDI pharmacies are at a significant advantage over non-PDI drugstores in this regard (See Figure 16).

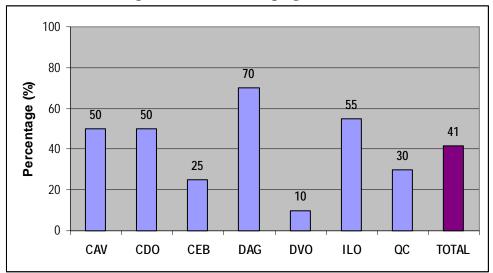


Figure 16. Records Keeping, PER SITE

Performance in record keeping was highest in Dagupan City where a significant majority (70%) of PDI-trained pharmacies recorded their transactions with the shoppers. Significant progress in this task was also manifested in the other pilot sites of PDI with the exclusion of Cebu and Davao. In the latter sites, records keeping posted insignificant differences between the observed PDI and non-PDI pharmacies.

While the mystery shopper results have shown substantial improvement, there are still obvious needs for continued efforts to enhance performance in records keeping. This is a big challenge, however, because the pharmacy personnel cannot see the need for such action since it primarily benefits the project, rather than their own operations. Sustained advocacy and the development of tools and practices that will facilitate efficient information generation in the pharmacy are needed. Accurate and reliable of data are mainly needed for project planning and continuous quality improvement.

Servicing Customers with Care

According to results, 95% of PDI pharmacies provided care to mystery shoppers while 89% of non-PDI pharmacies performed the same task. There is no significant difference between the 2 findings, which is not surprising given that the nature of business of pharmacies demand that pharmacy staff relate well to their customers.

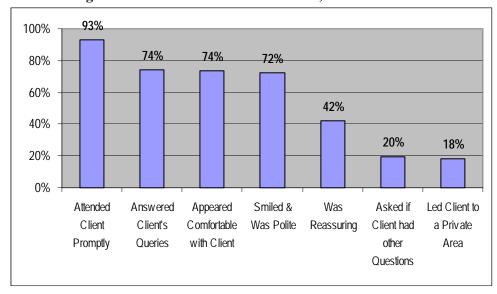


Figure 17. Care Provided to Customers, ACROSS SITES

Prompt attendance of the shoppers was prevalent (95%) among PDI pharmacies that provided customer care (Figure 17). Performance of PDI tasks affected the time or duration of client personnel interaction. Pharmacies generally invested an average of 11 minutes performing PDI pharmacy interventions whereas non-PDIs average 3 minutes transacting with the shoppers.

Secondary customer care practices include: (1) accommodating the shoppers' queries; (2) appearance of being at ease, and (3) politeness and congeniality towards the shopper. While having led clients to a private area for counseling would have been ideal, factors which prevented this consist of the lack of an appropriate area and restrictions on manpower which is further compounded by heavy customer volume during the conduct of transactions.

F. Systems Gaps and Issues

<u>Inefficacy of Information Management</u>

Recording transactions with TB-related clients is an obvious weakness among PDI pharmacies. Improvements in this area are crucial given that recording is a catalyst to the performance of subsequent PDI tasks. Without adequate data at the pharmacy level, it can be expected that information generated by the site management teams, which is essential to project monitoring and continuous systems improvement will be compromised.

Information management issues are primarily rooted in inefficiencies at the pharmacy level. An evident factor is that the pharmacy data forms utilized for the project are too complex and too lengthy for the pharmacy staff. Hence, several data fields have been neglected resulting to insufficient client information. While on-site coaching is intended to mitigate issues in this regard, pharmacy personnel have been observed to be distracted during such sessions partially due to the fact that their foremost concern is to attend to the counter and accommodate customers.

Site managers noted that insufficient client information is further aggravated by the practice of initially noting client information on scratch papers. This was originally meant to record client information in as subtle a way possible to avoid negative responses from TB-related clients. However, there is no clear

evidence that this has effectively established client confidence. In fact, additional encoding work becomes necessary, as staff has to transfer client information to official forms. Pharmacy personnel miss the opportunity to optimize the *Customer Data Form*²⁰ as a tool for more comprehensive and structured pre-screening.

Referral tracking is important to the management system of PDI. It is through this that the rate of access is determined and, more importantly, the measure of the project's contributions to local TB case detection. The mystery shopper results indicate that the recorded transactions obtained from the monitoring figures could be an underestimate.

Pharmacy Staff Turnover

Staff turnover has been a commonly articulated issue across all PDI sites. It was determined that pharmacy aides usually serve on 6-month contracts while chain drugstores commonly rotate staff among their local branches. The PDI pharmacies have thus lost 14% of its trained pharmacy staff over a period of 6 months. While 65% of the aggregate drug dispensing personnel in all 167 participating pharmacies were trained by the PDI during the earlier phases of the project, *junior-level* pharmacy staff comprised most (69%) of the PDI trainees with pharmacy aides/assistants as its majority (59%). This has posed constraints on the project given that imparting of PDI skills have been concentrated on the segment of pharmacy employees who are especially vulnerable to short-term contracts and frequent staff rotation.

Every loss of PDI trained staff relatively impairs the capacity of PDI pharmacies for quality drug dispensing. Again, on-site coaching is expected to address such issues. But coaching (or mentoring) is likely to be effective only for as long as the staff is employed in a PDI pharmacy. Pharmacy staff would generally require the support and endorsement of the pharmacy owner before being able to confidently practice proper drug dispensing. The expressed mandate of *senior management* could be integral to the sustained performance of quality drug dispensing practices among PDI-trained personnel.

Inadequate Adherence follow-up/Monitoring

During the course of 6 months, a substantial proportion (66%) of TB-related clients served by PDI pharmacies was noted to *bear prescriptions* for anti-TB Drugs. This is particularly true in each of the PDI site with the exclusion of Cavite and Davao.²¹ PDI-trained pharmacy staffs have been relatively successful in influencing a significant per cent (39%) of clients to opt for referral. Still, there are a considerable number of anti-TB drug purchases (58%), which places the client at risk of improper medication.

Even in certain PDI sites, prescriptions are instead issued by public DOTS Centers given the unavailability of certain anti-TB drugs, particularly for Category III patients. This emphasizes that there is a need for greater efforts among PDI pharmacies to encourage patient subscription to *adherence monitoring* so they can be assisted through proper and uninterrupted medication.

However, there are observable issues that impede pharmacy staff from offering adherence monitoring to drug purchasing patients. These include (1) low level of confidence to offer the service due to the professed complexity of the forms and the process (2) perception of the task as an added burden by pharmacy staff and the lack of incentives (not necessarily monetary) to follow-up on client medication (3)

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²⁰ This also serves as a Referral Form, recognized at all affiliate DOTS facilities. PDI pharmacy personnel have been trained to fill-out all data fields in the form.

²¹ Refer to Appendix 3b: Priority Indicators

inability to trace previous purchases due to inadequate client information, and (5) lack of insight into the potential profitability of the service. These issues should be addressed prior to the project's saturation.

Underutilization of IEC Materials

Philippine TIPS-PDI invested significantly to the development and reproduction of the PDI IEC materials²². The Mystery Shopper activity revealed however that the pharmacies have not been distributing these materials. Low utilization of brochures and pamphlets had been particularly noted. These are especially unexpected given that IEC distribution is considerably the least difficult PDI task to perform. Hence, issues on the materials' accessibility from the counter and the acceptability of its design and content to users should perhaps be re-evaluated.

G. Conclusion

Overall, the results show that drugstores can be effective disseminators of TB DOTS information and can be effective partners for increasing TB detection rates through pre-screening of TB symptomatic and referrals to DOTS centers. The number of recorded clients who were referred was significant (1,550). Although only about a third of these accessed the DOTS clinics (575), and were subsequently enrolled (164), these already proved to have significant contributions to TB case detection, given merely 6 months of actual implementation. From July to December of 2004, confirmed TB cases among PDI referrals constitute 8% of total TB cases in the DOTS Centers across the 7 sites. The MS Study has also demonstrated improvements in dispensing practices of pharmacy staff.

Validation exercises conducted in the pilot sites confirmed the local TB stakeholders' recognition of the PDI model in helping to enforce the policy of no dispensing of anti-TB drugs without prescription. There is a significant difference in the dispensing practices of PDI and non-PDI sites in this regard.

The culmination of the piloting phase has provided a wealth of documented field experiences that may serve as the best practices to incorporate in the plans for further model testing.

Apart from quantitative indicators as benchmarks for performance, there are other elements fundamental to effective PDI implementation at both site management and pharmacy levels. These include the following:

- 1. Enhanced participation of *pharmacy owners and permanent staff* in PDI capability building activities to ensure effective and continuous echoing/transfer of PDI skills and knowledge to novice personnel, assuring constant quality performance.
- 2. Conscientious and accurate recording of TB-related transactions by PDI-trained pharmacy staff.
- 3. Designation of a PDI pharmacy coordinator/point person to facilitate effectual PDI coaching and consistency of performance monitoring.
- 4. Mobilization of community stakeholders (i.e. barangay health workers) for referral tracing or client tracking and, potentially, adherence monitoring.
- 5. Promotion among pharmacy owners and managers (rather than among rank-and-file personnel) of the value and potential profitability of adherence monitoring.

²² Research into actual costs is currently being conducted by Philippine TIPS Central Management. .

- 6. Conscientization through strong TB orientation to influence good performance.
- 7. Formulation and early implementation of local policies and mandates (i.e. LGU resolutions, public agency memoranda, association circulars, etc) to ensure adherence to the *No prescription, No Anti-TB Drug Policy*.
- 8. Established commitment and ownership of local stakeholders to ensure sustainability and eventual institutionalization of the PDI project.

The Performance Monitoring System of PDI and the Mystery Shopper Study facilitated the assessment of the potential gains of the project at its current level of implementation. If the PDI saturation proceeds and we project that approximately 25 more additional pharmacies per site would be engaged as project partners, PDI referrals will likewise increase two-fold and will thus total 19,992 annually. Since monitoring reports indicate that 37% of PDI referrals actually access DOTS centers, we can thus assume that at 100% level of effort, 50 PDI pharmacies would have contributed to the identification of 7,397 potential TB symptomatics per year. Of these, 2,145 (29%) will be diagnosed as TB cases while 1,051 (49%) will test smear positive (+). Expanding the PDI interventions to 22 sites (or an additional 15 localities) will produce 6,735 verified TB cases and 3,300 diagnosed TB smear positive patients per year. All these clearly indicate the potentially significant gains of PDI and its contributions in the promotion and expanded coverage of the National Tuberculosis Program (NTP).

The continued participation of the local stakeholders from both the public and private sector has contributed largely to the considerable achievements of PDI. Concerted efforts between government and the national and local key players in the pharmaceutical industry have led to identification of a key partner in the task of reducing the incidence of self-medicating TB suspects and/or patients and contributing significantly to TB control.