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

DOTS*LINK* – SINGLE-PRACTICE PHYSICIAN'S NETWORK

Part 1: Single-practice Model Development – Report and Recommendations

Part 2: Implementation Plan for Pilot Project

Part 3: Strategies, Design, and Project Plan for the SPP-DOTS*Link* Network (Virtual DOTS for Single Practice Physicians)

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DOTSLink – Single-practice Physician's Network

Part 1: Single - Practice Model Development

Philippine Tuberculosis Initiatives for the Private Sector

Report and Recommendations

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ABBREVIATIONS

AFB	Acid Fast Bacilli (for sputum microscopy)
C-B	Community-based
DOH	Department of Health (Philippines)
DOTS	Directly Observed Treatment, Short-course
GP	General Practitioner
MDRTB	Multiple Drug Resistant Tuberculosis
NGO	Non-governmental Organization
NTP	National Tuberculosis Program
NTRL	National TB Reference Laboratory
PCCP	Philippine College of Chest Physicians
PhilCAT	Philippines Coalition against Tuberculosis
PhilHealth	National Health Insurance
PhilTIPS	Tuberculosis Initiatives for the Private Sector (Philippines)
PPM	Public-Private Mix
QA	Quality Assurance
RHU	Rural Health Unit (Government Health Center)
SPP	Single-Practice Physician
TB	Tuberculosis
VDC	Virtual DOTS Center
WHO	World Health Organization

SINGLE PRACTICE MODEL DEVELOPMENT

Final Report and Recommendations

I. BACKGROUND

According to the Philippines Department of Health (DOH), tuberculosis kills an average of 75 Filipinos every day. The World Health Organization (WHO) ranks the Philippines eighth in the world in estimated incidence of tuberculosis (TB), which in 2002 stood at roughly 330 per 100,000 people. This may even be an underestimate, due to the fact that many persons do not seek medical attention for their illness, for fear of the unique stigma with which TB sufferers have historically been branded. In both economic and social terms, tuberculosis represents a major obstacle which must be overcome if Philippine national development is to fully flourish.

The DOH's National Tuberculosis Program (NTP) has responded vigorously to this challenge, in recent years achieving impressive results in cure rates for patients treated in public health facilities. Private health services, however, which deliver a major portion of the country's health care, has lagged behind. While in recent years the public sector has achieved a success rate of close to 90% in curing TB in its patients, the corresponding rate for the private sector is no more than 50%. Clearly, an essential element in reducing the burden of TB in the Philippines is more effective involvement of the private sector as a partner of Government in curing and preventing the disease.

The Tuberculosis Initiatives for the Private Sector (PhilTIPS) project of Chemonics International, funded under a USAID contract, contributes in numerous ways to this effort. Its core business is developing approaches to private sector delivery of Directly Observed Treatment, Short-course, or DOTS, designated by the WHO as the most effective treatment regimen for TB and adopted as treatment policy by the DOH. PhilTIPS is doing this by developing private "DOTS Centers", supporting hospital-based delivery of DOTS services, testing NGO, pharmaceutical and workplace DOTS models, and other initiatives.

In January, 2004, PhilTIPS asked a team of consultants to explore approaches to more effective involvement of private, single-practice physicians in incorporating the DOTS regimen into their routine treatment of TB. In the Philippines a high percentage of people, even those of modest means, seek health care from private practitioners. Of these, the largest percentage is represented by "single-practice physicians" or SPPs. Perhaps more than any other initiative, expanding

participation of these providers in use of DOTS will substantially increase the private sector's share of successful TB treatment in the Philippines.

II. OBJECTIVES OF THIS ASSIGNMENT

For purposes of this analysis, "single-practice physicians" are defined as those with individual, private practices in Philippine cities, towns and rural areas. Numbering, by various estimates, between 12,000 and 15,000 nationwide, SPPs are typically trained as general practitioners or family physicians, although a small percentage may have additional specialty training. A few may also have hospital-based practices, but this assignment focused on the services provided from their private, single practitioner, community-based clinics.

SPPs have, in general, been slow to adopt the DOTS regimen. Some, generally the more veteran providers, simply can't be bothered. Others are willing but unfamiliar with the component parts and rationale for DOTS. To better understand the reasons for this, and why these doctors are not more vigorous advocates of DOTS, the single-practice model development team was asked to conduct a rapid appraisal of SPPs in various areas of the country. It's purpose was to look at their TB caseloads, their approach to diagnosis and treatment, and their access to relevant information and services. Based on appraisal findings, the team was then asked to recommend a model or models, to be tested by PhilTIPS, whereby SPPs could be brought vigorously into the DOTS mainstream, depended on to implement the regimen that is the surest cure for tuberculosis.

III. APPRAISAL OF SINGLE PRACTICE TB TREATMENT STRATEGIES

III.A. Approach

The team was first briefed by PhilTIPS staff on the range of their private sector activities, and the large niche that the program sought to fill through this exercise. In the course of the assignment the team also reviewed numerous research and program reports and other documents. (See **Appendix B,** Bibliography.)

The team's rapid appraisal of current TB treatment strategies was conducted among single-practice physicians in several parts of the Philippines. Its goal was to determine:

- patterns of treatment practice among SPPs, their networks and referral systems;
- levels of knowledge and appreciation of the relative efficacy of different TB treatment protocols;

- awareness on the part of SPPs about the DOTS regimen, and willingness to apply it;
- past participation in DOTS orientation and training programs;
- nature and quality of interactions of private and public sector providers and services;
- effective approaches, from observation and solicitation of suggestions, to engaging SPPs more comprehensively in the DOTS strategy.

The team divided itself into three sub-teams of two members each for this phase of its work, so as to enable it to reach out to as wide a cross-section of providers as possible. It also developed a discussion guide to help team members structure their interviews.

III.B. Site Selection and Coverage

Contacts for interviews were made in a randomly selected group of cities and towns of varying sizes, including Angeles, Bacolod, Bacoor, Cagayan de Oro, Cavite, Cebu, Lucena, Metro Manila, Quezon City and Tayabas. In all, the team spoke with roughly 50 physicians, largely GPs and family physicians, but also a handful of specialists in internal medicine, pulmonology and infectious disease. The list of physicians interviewed, along with other contacts made in the course of this assignment, appears as **Appendix A**.

While most of the contacts for the rapid appraisal consisted of individual interviews with single-practice physicians who manage their own community-based private practices, interviews were also held with doctors operating from private hospital settings. Contact was also made with public sector providers, including visits to public health centers, so as to gain insight into the referral environment between SPPs and public-sector TB services. A group of five practitioners was interviewed in a focus group format (in Angeles), and a focus group was also conducted with officers of the Philippines College of Chest Physicians. Early on, the full team also visited the private DOTS Center at the De La Salle University Medical Center in Cavite.

III.C. SPP Profile

Private clinics of SPPs interviewed typically consisted of a waiting area (either within the premises or partially on the street), modest space for the physician's secretary, and a small consulting/examination room. Few had in-house laboratory services, but all reported access to microscopy and x-ray facilities in the local area. About 20% of the doctors dispensed a modest selection of drugs.

Few respondents interviewed could spontaneously report accurate caseloads. Approximate patient loads reported by SPPs varied anywhere from 10 to 50 per day, with TB patients constituting between 5% and 25% of the total, primarily at the lower end. A typical response was that they saw "3-5 new cases per month".

SPPs described their clientele as falling mostly in middle to low-middle income groups, commonly segmented by physicians as those with and without adequate financial means to cover TB therapy. Clinic consultation fees varied widely – from P100 to P300 – with most physicians claiming that their fees were flexible, depending on ability to pay. Almost all patients were "walk-in", or self-referred.

III.D. Findings

Detailed findings of the single practice team's rapid appraisal are contained in the team's report to PhilTIPS on Phase I of this assignment, dated January 28, 2004. In general, it found that SPPs have been slow to adopt the DOTS regimen, tending instead to treat suspected TB patients more traditionally, with visual examination and chest x-ray, and limited use of sputum testing. They have usually heard of DOTS, in the sense of the protocols employed in public health centers, but often not the term explicitly, and are usually not familiar with its component parts and rationale. Further, some see health center protocols as too stringent, designed to reduce the number of patients accepted.

Some SPPs, mostly longtime GPs, appear to be relatively set in their ways, and are unlikely ever to become DOTS users and advocates. They do not see the regimen as a useful diagnostic and treatment tool within the private sector environment, where all services must be paid for and be affordable. A majority is interested, however. They know DOTS is the best way to treat TB, as evidenced in part by the fact that they do refer patients to the health center. But the link is so far not a strong one, for several reasons:

- Some patients refuse to go to the public clinic, where they fear suffering the stigma that they feel is attached to "going public" with tuberculosis.
- Patients who do accept referral to the health center, and who test AFB-negative, are rejected for free drugs, which is de-motivating.
- Patients often feel that public sector drugs and services are inferior, and return to their SPP for treatment.
- SPPs usually don't themselves have sputum testing capacity, access to free or low-cost drugs, nor experience organizing treatment partners, all essential components of the DOTS regimen.
- SPPs have neither time nor inclination to do essential record keeping and case reporting.

When patients return to them, unhappy with services elsewhere, even SPPs willing to do DOTS tend to fall back on traditional assessments (visual diagnosis, chest x-ray, less-than-full AFB series), often leading to inadequate prescriptive practices and complications, such as multiple drug resistant TB (MDRTB).

In short, notwithstanding the availability of relatively effective DOTS services in public health centers, an important cohort of patients is not accessing DOTS

treatment via their physicians. Yet despite these obstacles, the team's overarching conclusion is that:

> *Single practice physicians occupy a critical niche in the services arrayed against TB. With rare exceptions they cannot, individually, implement a full DOTS regimen, but many would willingly become DOTS providers if necessary support systems were available. This would greatly enhance the private sector's overall contribution to national TB cure and detection rates.*

The team found that, with very few exceptions, SPPs are not in a position to establish their own "DOTS Centers", that is, to themselves provide the full DOTS regimen for their TB patients. Many would, however, willingly join and effectively utilize the resources and services that could be made available through a community-based DOTS support entity, if one could be established to meet the particular requirements of them and their community.

IV. COMMUNITY ORIENTED "VIRTUAL DOTS CENTER"

IV.A. Introduction of the Model

In view of its findings, the single practice model development team recommends adoption of a community oriented, purely private sector approach to stimulating SPP participation in promotion and use of DOTS. The "Virtual DOTS Center" model is so named because, rather than being a service located in one building, as with traditional DOTS Centers, it will instead consist of a network of services and resources available in a community, made accessible in a coordinated fashion. These will be managed and coordinated through a designated manager/coordinator, who may be appointed from within the network or be an external volunteer.

The Virtual DOTS Center model constitutes a single basic approach, to be adjusted according to the specific characteristics of the communities in which it is applied. It is designed to flexibly respond to expanding patient choice of service depending on preference and ability to pay. It provides a structure through which to identify and ensure SPP access to the resources and services in a given community needed to fulfill the various elements of the DOTS regimen. Properly managed, this entity should be able to obtain accreditation normally provided to single site facilities as an integrated DOTS service, eligible to receive free drugs. While seeking such accreditation, it would from the outset provide technical and coordinative support to participating SPPs by ensuring:

- identification and certification of microscopy facilities;
- identification, training and management of treatment partner networks;
- exploration of opportunities for guaranteeing drug supply;

- establishment of Diagnostic Committees to review AFB neg. test results;
- coordination of reporting and recording of DOTS cases.

Successful launching of this model will place a premium on skills in community organization and outreach, which PhilTIPS is encouraged to add to its staff as it prepares to test the model.

The objective of the establishment of a Virtual DOTS Center is to ensure that patients of all SPPs in a particular community are correctly diagnosed and treated through DOTS, while remaining under the care of their private doctor. Secondarily, it is to provide patients with an alternative source of DOTS service, even if they might otherwise be willing to be referred to a Health Center or private DOTS Center (if available). The wider the range of services or products available, the greater the prospects for compliance and, ultimately, reduction in the TB caseload. Some measure of relief to free public sector provision may also be achieved. The implementation objective of the program is to test a range of community-based options for provision of DOTS services to patients of SPPs.

IV.A.1. Essential elements of a Virtual DOTS Center Model

To accomplish its objectives, the Virtual DOTS Center must ensure the following:

i. Identification of SPPs willing to participate and their orientation, training and certification. Commitment on the part of SPPs to ensuring all patients are treated according to the DOTS regimen, across all socio-economic groups, with allowance for sources of service and ability to pay;

ii. Identification of private-sector laboratories willing to provide quality, reasonably priced sputum (AFB) testing, supporting their training and 'certification', and ensuring, if possible, the choice to access public services for testing alone for those who cannot afford to pay;

iii. Choice of drug sourcing and pricing according to quality, patient preference and willingness to pay -- ideally including free drugs, low-cost generic drugs, and full-price, branded drugs through prescription;

iv. A reliable community-based group or groups able to provide a treatment partner for each patient, network oversight of treatment partners, tracking of 'drop-out' cases, and recording and reporting (to the NTP) of TB cases under observation, all within their present community-based activities.

v. A reliable mechanism whereby SPPs can refer to a Diagnostic Committee to ensure AFB-negative patients are correctly accepted or rejected for DOTS treatment.

vi. Effective oversight and reporting of patient compliance and history to cure.

vii. Provision of DOTS center logo and signage to all participating elements, promotion of the service, and provision of print materials as 'reminders' to take medication and keep follow-up appointments with practitioner.

viii. Assurance of collaboration, coordination, quality assurance (QA) and monitoring provided by the Virtual DOTS Center for all of its elements, and management to levels of sustainability.

PhilTIPS will need to identify and test community groups as to their capacity to be the focal point of the Virtual DOTS Center, supplying quality DOTS services, as listed above, within the context of the services they already offer. Cost of services, management experience, sustainability and replicability will be key elements for analysis across all trial sites.

IV.A.2. Model Variances

Within the core "virtual" model there will be a range of variances to be tested for practicality and cost effectiveness. The strategy assumes that these cannot be predetermined, but will evolve through the process of understanding and working within the unique characteristics of communities chosen for trial programming. Variances will include:

i. *Patient load and number of SPPs able to participate in any one Virtual DOTS Center*. At the outset, it is assumed that a "manageable" network would generate 250 DOTS patients per annum. On this basis, community-based activities would involve direct contact with 23 patients per day (see section VI for details). This would be a reasonable level of effort for the average community-based organization within a typical metropolitan area. For analysis purposes it is assumed that a network of 10 SPPs, with promotional support, could generate this volume of DOTS patients. Variances will exist between different metropolitan areas, resulting in smaller or larger networks and / or the establishment of more than one network in larger municipalities.

ii. *The willingness of SPPs, as well as laboratories, to pay for certification and a 'franchise' fee based on a percentage of their increased income.* This can only be elucidated in the course of the set-up and 'road show' activities that will precede implementation (see below). It is possible that SPPs will agree to this strategy in some sites but not in others. Where none agree, this concept will have been shown to be unfeasible.

iii. *The willingness and capacity of community-based organizations to manage the distribution of drugs, either free or at a cost.* Along with the practicalities of charging for community-based services, this can only be

determined through discussions with those organizations willing and able to participate at each site.

iv. *The availability of free drugs*. The manner in which "networks" are established and legal entities involved may, or may not, permit access to free drugs for distribution through the community-based organization managing the VDC. If free public sector provision is approved across all sites it is suggested that one or more sites test a purely private sector approach that offers very low-priced drugs only, as outlined below. The impact of offering free drugs (or a choice of free and low-priced drugs) could then be analyzed against sites offering only low-priced drugs.

v. *Carefully designed and monitored market segmentation strategies* that offer a range of services and costs to consumers according to their preferences and ability to pay. SPPs will, no doubt, continue to refer patients constrained by cost to Health Centers. Some of those will return to the SPP for reasons described elsewhere, others will not. Patients in higher-income groups may refuse to be referred, preferring treatment only from their physician. The extent to which these patients are properly DOTS patients will need to be carefully evaluated. All of the different preferences and variables will need to be built in to program planning, along with evaluation of lessons learned.

vi. *Added benefit of the VDC within municipalities with an existing private DOTS Center* as against testing the concept in sites that may have a private DOTS site in the future (well after the Virtual DOTS Network is established) or may never have access to a private DOTS Center.

The most compelling variables for trial and comparison are:

- Whether the program is operated within an area serviced by a fixed, private DOTS Center or not.

- Whether free drugs are to be supplied, drugs are to be paid for, or a choice of either.

- Whether the virtual center takes the form of a "fractional franchise", with SPPs contributing a percentage of consultation fees to promote and sustain it, or whether it is developed, and sustained, as a more informal 'network'. (See Section V.)

In order to give a reasonable opportunity for the variances described above to be tested, 4-5 trial sites for Virtual DOTS Centers should be considered at the outset. The number of test sites would also be a matter of budgetary, staffing and management consideration within PhilTIPS.

IV.A.3. Process for Setting Up a Virtual DOTS Center

As an indicator to PhilTIPS of possible level of effort required, the following process is suggested for establishing Virtual DOTS Centers within municipal areas selected for testing:

i. Survey of interest and resources in proposed location, to gather information such as:

- Willingness of SPPs in area to support, and draw on, a Virtual DOTS Center. It is suggested that a minimum of 10 SPPs would constitute the "critical mass" necessary to consider launching a center;

- Interest of other medical professionals engaged in TB practice in both the public and private sectors;

- Potential for support from other supporters and TB 'activists';

- Existence of community-based groups - NGOs, faith-based groups, civic organizations, etc. – that could serve as manager/coordinator;

- Willingness of local Medical Societies and other relevant professional associations and organizations to lend moral or practical support to the Virtual DOTS Center concept;

As a first step in facilitating this survey and promoting the concept, mailing lists of SPPs, NGOs, associations, community groups, commercial firms and laboratories in the municipality and surrounding catchment area should be obtained. This will facilitate personal contacts and mailings describing the Virtual DOTS Center initiative and announcing its formal introduction at a forthcoming "Road Show". The promotional effort will be led by the new PhilTIPS Communications office.

ii. Virtual DOTS Center "Road Show"

The road show format will borrow from that already used to considerable success by PhilTIPS in promoting other private sector TB/DOTS initiatives. It will be more inclusive than other road shows, in that it will bring together a wide range of potential Virtual DOTS Center participants and users, those identified from preliminary site visits and those responding to mailings. The road show will NOT serve as a training vehicle, but rather be a program design mission. The broad outline of a road show will be as follows (see **Appendix C** for further details):

- Presentation of the components and importance of the DOTS regimen as the only certain cure for tuberculosis.

- Explanation that the purpose of the meeting is to establish a DOTS service and network for the use of SPPs in serving their TB patients, including rationale for and objectives of the Virtual DOTS Center.

- Exploration of the most feasible ways that the center might be established, by the range of component elements required, in that particular municipality.

- Begin to sketch out size and scope of the network to be coordinated by the Virtual DOTS Center, the resources available and their functions.

- Clarify the in-puts to be provided by PhilTIPS and expected from participants: level of effort, overall management, sustainability, costs and budgets.

- Clarify potential interest in participation by respective road show participants.

- Entertain proposals/applications for entity (NGO, community group, faith-based organization) or individual (SPP, retired physician, other community volunteer) to serve as manager/coordinator of the Virtual DOTS Center.

iii. Subsequent Preparatory Activities

Management assesses results of Road Show, holds one-on-one meetings with interested parties, and works to establish a consortium willing to support the Virtual DOTS Center. Hopefully makes final selection of entity to serve as manager/coordinator. Assuming that all elements are in place, calls first implementation meeting, co-chaired by PhilTIPS and manager/coordinator. This meeting will be followed by additional meetings until ready to launch the center.

iv. Launch

The Virtual DOTS Center will be launched with a significant ‘event’ involving political and other important community and religious leaders, with media coverage assured in advance. Press advertisements and radio spots broadcast to attract potential TB patients. Regular press releases distributed. Network logo and signs erected at SPP clinics, laboratory and participating community-group sites. Orientation/training completed of SPPs, staffs of laboratories selected for sputum testing, and community-based treatment partners. Patient monitoring and reporting systems established. Drug requirements procured and in place for distribution.

v. Monitoring

PhilTIPS management remains in the field to ensure all is working smoothly and to help resolve problems. Monitors the program after one more month and at

least every three months after launch. Interim evaluation after six months of operations. Monitoring and evaluation exercises will include:

1. Assessing the extent to which patient loads have been met; # of patients referred to health centers who do and do not return for SPP consultation; # of patients being followed by Virtual DOTS Center treatment partners.

2. Discussing with SPPs their level of appreciation of this initiative, any cases not referred to either the Health Center or Virtual DOTS Center, and whether they can be regarded as DOTS patients. If a yearly fee was agreed on, discussing whether SPPs still agree with it, and otherwise reviewing sustainability issues and options for sponsorships or other income.

3. Assessing shifts in patient referrals to Virtual DOTS Center from a pre-program baseline. Reviewing causes of patient drop-outs. Where free drugs only are given, determine acceptability. Where low-priced drugs are given, assess affordability. Where both are given, assess the socio-economic characteristics of those who chose one or the other and why. If one or other has no (or few) takers, amend appropriately. Determine whether fees are acceptable, and amend accordingly.

4. Reviewing patient records, ensuring adequately and properly kept. Explore actions where patients drop out, and whether reported to authorities.

5. Reviewing with the community-based Virtual DOTS Center management group (or groups) their experience to date, costs and income, and determination if they are willing and able to continue. Explore solutions if not.

6. Evaluating efforts to obtain sponsorship funding, levels and prospects for continuation and expansion.

7. Assessing the management of the Virtual DOTS Center with the appointed management group. Rectify any difficulties. Explore sustainability issues for the future six months, and sustainability when program support will cease.

It is assumed that costs for the above will be born by PhilTIPS, including on-going costs of monitoring and evaluation and, if applicable, deferred franchise fees for an interim period. There may also be modest continued support for management costs governing a first “revolving stock” of low-priced drugs.

IV.B. Establishing Virtual DOTS Center Microscopy Capacity

IV.B.1. Orientation to Importance of Sputum Microscopy for DOTS

In its rapid appraisal, the single-practice model development team discovered that SPPs, unlike their public sector counterparts, are not convinced of the

rationale for utilizing sputum microscopy in diagnosing TB cases and assessing cure. Although the commitment of the DOH and the NTP to sputum microscopy as the essential diagnostic tool within the DOTS regimen is well known, it has not yet "infected" SPPs on a large scale. Many simply do not accept its reliability, as compared to the traditional use of chest x-ray, because of what they see as a preponderance of negative results. Also, sputum AFB smears are expensive. In private laboratories, tests range from P60 to 150 per smear, or P180 to 450 for the usual course of three smears for diagnosis, more costly than a chest x-ray.

SPPs who agree to participate in the Virtual DOTS Center must, through the "road show" and subsequent follow-up, be given full orientation in the use of sputum microscopy as the definitive TB diagnostic tool in the DOTS regimen, with x-ray as back-up, rather than vice versa. Coordinating this orientation and its follow-up will be a key responsibility of the Center's management entity.

IV.B.2. Identification and Training of Microscopists

Private laboratories in focus communities that are willing, as part of the Virtual DOTS Center, to provide quality, reasonably priced sputum (AFB) testing, after appropriate training and 'certification', must be identified. Ideally, representatives should be invited to the first road show, so as to be made aware of the Virtual DOTS Center from the outset. A local network of "licensed" laboratories should be promoted, so that SPPs know where to send smears for testing and be assured of quality service.

Training of microscopists has to date been centralized in Manila, much of it funded through foreign donors. The cost of training at the National TB Reference Laboratory (NTRL) has ranged from P1,900 to P3,000 per head. It is to be hoped that, as part of operationalizing the community-based Virtual DOTS Center model, PhilTIPS will be able to spur decentralization of training and licensing capacity across the country. As more microscopists are trained, the number of laboratories capable of performing sputum microscopy multiplies, and the more accessible the service becomes. Such a trend will benefit the establishment of DOTS centers, virtual and otherwise.

IV.B.3. Costing

As noted, the rapid appraisal interviews determined that sputum AFB tests in private facilities cost the patient from P60 to P150 per smear. Following the law of supply and demand, if the demand for sputum AFB as a routine test increases, the cost of the procedure should decrease, since there is an assured market for the procedure, one that will expand with the greater involvement of SPPs in DOTS treatment of TB.

This is not to say that the cost of smear tests could not be reduced even now, at least for those with limited capacity to pay. An international NGO, the Committee

of German Doctors, charges only P19 per smear test in its DOTS clinics, mostly in Metro Manila. The De La Salle Hospital private DOTS Center charges P48. Clearly there is room for the Virtual DOTS Center to test a price structure that responds to patients' limitations while not losing money for the laboratory.

Costs of equipping a laboratory to add sputum microscopy to its services will vary. Some labs may need renovations or new equipment, others may need relatively little upgrading. In larger communities, sputum collection sites away from the laboratory itself will need to be established according to DOTS standards, as will specimen pick-up services. A very rough estimate of the cost of preparing a laboratory to be part of the Virtual DOTS Center would be in the P6,000 to P8,000 range, plus (if needed) the cost of a microscope.

As discussed in section V.A., the willingness of SPPs, as well as laboratories, to pay for certification and a 'franchise' fee based on a percentage of their increased income will have implications for long term sustainability of the VDC.

IV.C. Drug Availability and Costing

A review of the TB drug market indicates that an adequate stock of TB drugs appears to be available to supply both free public service (supported by 3-year Global Fund commitments) and within the commercial pharmacy market.

Commercial-sector branded drugs are within the range of P40 – P50 per daily dose, with generic drugs retailing at about P25 per dose. The majority of SPPs interviewed by the single practice model development team seemed to prefer prescription of branded drugs, even though they reported that drug prices are a significant impediment to private-sector provision of TB services. It may be inferred from this that there are quality constraints impeding take-up of generic drugs, and/or they are not so readily available everywhere in the market.

Anecdotal reports indicate the commercial market for TB dugs has grown only sluggishly, with the increase in public sector provision being the principle cause. As a result, manufacturers and distributors are uncertain as to the size of the future market, while finding the market highly competitive. This has led at least one manufacturer (United Laboratories) to plan a non-generic, quad-pack brand to be introduced at just under the generic price of P25.

The review noted that the Committee of German Doctors for Developing Countries TB project is procuring drugs at about P5 per day, unpacked, from Biogenerics Philippines. This manufacturer reported that they could supply Rifampicin, Isoniazid, Pyrazimamide and Ethamutol at this price for orders of one million units (about 5,500/patient requirement). However, it is assumed that for trial programming purposes they would supply a lesser amount.

For notional planning purposes the review assumes low-cost drugs could be arranged at a price of P10, including some reserves for packing into daily dose amounts and a small incentive profit. During project implementation, other sourcing and pricing options may be explored.

DOH policy allows for some donation of free public sector drugs to private sector distribution, for example through DOTS Centers. The primary obligations for access are that the center is operating within a legal entity, has an in-house pharmacist and is implementing DOTS strategy. It is not clear that a "virtual" DOTS network, where the DOTS elements are distributed across many players, would qualify for free drugs. However, approval may be obtained if an NGO responsible for Virtual DOTS Center management and coordination can demonstrate it has its own clinics, i.e., those of its member SPPs, and is supported in its application by PhilTIPS and PhilCAT. Other scenarios will need to be explored within the respective network environments of each site.

IV.D. Establishing and Managing Treatment Partner Networks

IV.D.1 Sources of Treatment Partners

Central to the successful functioning of the Virtual DOTS Center will be the identification of a reliable community-based group or groups able to provide a treatment partner for each patient, network oversight of treatment partners, tracking of 'drop-out' cases, and recording and reporting of TB cases under observation, all within its other community-based activities. Requirements for a dependable treatment partner are simple:

- Training on DOTS regimen
- Dedication and willingness to serve
- Reports to Virtual DOTS Center manager

One of the reasons that single-practice physicians have not more fully embraced DOTS is their lack of access to treatment partner networks. Their tendency has been to give their secretaries responsibility for follow-up, or, in a few instances, do it themselves. This of course means that their patients are more or less left to themselves to follow their drug regimens, with uneven results, to say the least.

Treatment partners for TB DOTS patients come from many sources. Public sector DOTS programs depend primarily on barangay health volunteers, who often receive a modest stipend as incentive for their efforts. Some NGOs depend largely on family members as treatment partners (Friendly Care). Others consciously avoid family members, whom they consider unreliable, instead recruiting friends, workplace companions, or former TB patients. Treatment partners may not be compensated, but the programs for which they work arrange to give them travel allowances, gifts, or other modest inducements.

IV.D.2. Selection and Training

Training of treatment partners is equally varied, lasting anywhere from one hour to 2-3 days. The important thing is that they be fully briefed on the importance of their role in ensuring that patients on the DOTS regimen are rigorous in taking their medication every day, without fail. The other important element of treatment partner training is on the proper use and completion of treatment cards.

The introductory road show will be a first, important opportunity to make contact with community-based organizations that might be able to field treatment partner volunteers. Conceivably, one of these might also be the organization that accepts the role of manager/coordinator of the Virtual DOTS Center for that community. PhilTIPS will work with the manager and participating partners to identify appropriate sources of treatment partners, and design training to equip them to monitor the TB DOTS patients of participating SPPs.

IV.D.3. Cost Issues

Although a low-cost element of the DOTS regimen, there are some expenses associated with setting up and managing a treatment partner network, depending on the type of partner recruited. Estimates below are for different types of partners, based on assumption of 27 “direct observation” home visits per patient:

- *Family member or close friend*. Requires training by Virtual DOTS Center (P100 for materials and food) and a token gift (P100). Little or no transportation expense. Total cost for direct observation of one DOTS patient over 6 months course: P200

- *Barangay health volunteer*. Already trained. Requires transportation allowance (P300) and token gift (P100). Total cost over 6 months: P400

- *NGO worker*. Requires training by Virtual DOTS Center (P100 for materials and food), transportation allowance (P300) and token gift (P100). Total cost over 6 months: P500

If one assumes that the same entity that fields treatment partners will also undertake patient monitoring and reporting protocols, some training and related costs for this element would also need to be included in budgeting.

IV.E. Establishing Diagnostic Committees

IV.E.1 Present Status

The function of the Diagnostic Committee is to evaluate sputum smear negative patients who are suspected of having TB, the objective being to identify active smear negative patients. Such committees currently exist only in some public

sector centers, and are composed of government doctors and prominent private physicians. The committee usually meets weekly to monthly, depending on case needs, and receives no compensation.

IV.E.2. Recommended Community Model

To fully and responsibly implement DOTS with SPPs, the Diagnostic Committee model should be applied to private sector patients in the Virtual DOTS Center community. Its function and objectives will be the same as in the public sector model. The committee will be comprised of all SPPs associated with the community-based Virtual DOTS Center (minimum of 10). Negative sputum smear patients will be referred to one of the SPPs for a second opinion. If the colleague concurs, the patient will be admitted into the program. Otherwise, a third consult is obtained. The rule of the majority prevails.

The strengths of this model are (1) there is no cost of setting up the Diagnostic Committee, or its functioning; and (2) a decision can be reached more quickly than with the public sector model. There are, however, lingering issues:

- It is not customary for SPPs to refer patients to each other, so this will take adjustment;
- It is unclear whether a patient should pay for second or third opinions;
- A question remains as to what should be done if a patient demands a prescription and outsources the drugs.

IV.F. Recording and Reporting

IV.F.1. Requirements

Meeting recording and reporting requirements is an essential element of the application of the DOTS regimen, to maintain an accurate status report on incidence and outcomes. In a fixed, private DOTS center, the supervisor completes the Master List of TB symptomatics, the treatment card, identification card and TB register. He/she prepares quarterly reports on new and relapsed cases, drug inventory, and the “counting sheet” for treatment outcomes. The microscopist completes the laboratory register, and is responsible for the quarterly report and counting sheet for laboratory activities. Reports are submitted to the DOTS administrator, who in turn submits them to the NTP.

IV.F.2. Issues and Suggested Approach

The rapid appraisal of single-practice physicians showed that they find record-keeping distasteful. They view recording and reporting requirement of the DOTS regimen confusing and time consuming, with no financial benefit. Even though disposed to using DOTS, they are unwilling to undertake this part of the process.

For this reason, and to standardize and centralize recording/reporting for the Virtual DOTS Center, the manager/coordinator will oversee this function. He/she will coordinate with microscopists and treatment partners, and as needed with participating SPPs, to be sure of obtaining required records, and will be responsible for filling out reports for submission to the NTP. Expected expenses not covered elsewhere would include computer software for data tabulation.

V. MANAGEMENT AND FINANCIAL SUSTAINABILITY

This section is designed to present some notional assumptions concerning the financial sustainability of a Virtual DOTS Center, as a guide to PhilTIPS' assessment of potential strategies.

V.A Overall Assumptions

Financial and management sustainability of the community-based Virtual DOTS Center must be built into the project from inception. The donor's objective should be to invest in the establishment of the network until such time as it can sustain itself in terms of on-going operations, increasing patient loads, and replacing drop-out partners.

For budget estimating purposes, a Virtual DOTS Center established within a municipal area is assumed to cover a minimum cohort of 10 trained and certified SPPs, 2 certified laboratories with trained microscopists, and a community-based network providing case management, recording, and treatment partner services. Planning assumes that each Center will be developed as a separate entity, unique to its community, and will be a self-sustainable unit. At this point in time it does not seem feasible to consider a scenario where the cost of developing the network could be recovered from a higher level of income and profitability than that assumed, and that the Virtual DOTS Center could thus be a profitable business venture. However, if operational sustainability can be reached it will present a compelling model of a '"social business" or "social franchise" that should be of significant interest.

V.B. Detailed Assumptions

Current Case Load and Income of SPP

- On average, half of all TB patients are currently seen only once before being referred to a Health Center, and do not return to the SPP.
- Of the other half, some are referred to the Health Center but return for monthly visits, others are not referred and remain a patient of the SPP.
- Of patients retained, each visits the SPP a total of 8 times.
- Total TB patient load retained for regular treatment is about 6 patients at any given time.

- Each SPP has a caseload of 2 TB patient consultations per week or 100 per annum
- Assuming P200 per consultation, each SPP will be earning consultation income for TB of about P20,000 per annum.
- Total physician patient load is assumed at about 60 per week or 3,000 per annum, with total consultation income of about P600,000.

Case load after first full year of DOTS program

- With establishment of Virtual DOTS Center, SPP gains 1 new TB patient per week.
- Of new patients, 25% are referred to the Health Center after only one visit and do not return.
- 25% are referred to the Health Center where they receive treatment but return to the SPP for regular consultation.
- 50% are retained by the physician and provided DOTS treatment through the SPP Virtual DOTS Center.
- Total new patients per annum - 50
- Patients served by the SPP - approximately 38
- Number of patient visits: 38 X 8 = 304, plus about 12 single visits from referred patients. Total est. patient visits: 316
- Total consultation fees = 316 X P200 = P63,200

Based on these assumptions, total additional fees earned as a result of a single-practice physician's participation in a Virtual DOTS Center program would come to: P43,200 per annum . Total increased revenue to the practice would be P643,200 or an increase of about 7%.

SPP referrals to Virtual DOTS Center community services

- Assuming that an average community-based, Virtual DOTS Center network consists of 10 physicians in any one metropolitan area, or part of a metropolitan area, total TB patients referred to it would be 25 per SPP per annum, or 250 per annum for all 10.
- Assuming that each patient was visited, on average, once every two days for the first month, once every week for the second month and once per two-weeks for four months, total treatment partner visits per patient would be 27. Total network visits would be 250 X 27 = 6,750, or about 23 per day in a 300-day year.
- For cost analysis purposes it is assumed that patients who receive free drugs would be willing to pay a token fee of P5 per visit. In addition, those who will pay for a low-cost drug will pay P10 per day for drugs, out of which the community-based distributor would gain income of P2.

New sputum tests required

- Total new patients requiring sputum tests: 250 patients X an average of 6 tests = 1,500.

- Cost (without discounts) assumed at P130 each. Total increased revenue = P195,000.
- If caseload for a Virtual DOTS Center is shared by two laboratories, this would mean an additional income of P97,500 for each laboratory.

V.C. Other Budget and Income Projections

In-puts required for a potentially sustainable network of 10 SPPs and related supporting services (2 laboratories and a community-based network servicing 23 patients per day) would include the following notional estimates of Virtual DOTS Center expenditures and income, per annum, in Pesos. Figures exclude SPP and laboratory income, since that is retained by provider.

SUSTAINING THE PROJECT

	Sub-model A Free drugs. Franchise fees	**Sub-model B Free drugs. No franchise fee**	**Sub-model C Low-priced drugs. Franchise fee**	**Sub-model D Low-priced drugs. No franchise fee**
Expenditure estimates				
Advertising Costs	50,000	50,000	50,000	50,000
Print materials	20,000	20,000	20,000	20,000
C-B worker incentive	36,000	36,000	36,000	36,000
Patient management costs	124,000	124,000	124,000	124,000
General management	67,000	67,000	67,000	67,000
Drug cost & P5 per day			225,000	225,000
Cost of packaging / trans.			135,000	135,000
TOTAL COSTS	**297,000**	**297,000**	**657,000**	**657,000**
Income estimates				
Fee income at comm. level	36,000	36,000	36,000	36,000
10% fee from SPPs	49,200		49,200	
10% fee from lab.	19,500		19,500	
Sale of drugs at P10			450,000	450,000
TOTAL INCOME	**104,700**	**36,000**	**554,700**	**486,000**
Losses to be covered from corporate sponsorship or donation or further inputs from participating entities.	**192,300**	**261,000**	**102,300**	**171,000**

Estimated Annual Income for Network components:

SPP: From Consultancy Fees: P 63,200
Additional income because of project: P 43,200

Laboratory: Additional Fees from project patients: P 81,200

Community-based Virtual DOTS Center:

Fees from patients to cover field-workers:	P 36,000
"Profit" from drug sales (if applicable):	P 90,000
Support to patient management costs:	P124,000
Total:	P250,000

Total expenditure per patient: P 1,000

Once established, and assuming the trial program proves successful, the project will be required to sustain itself from income. It is assumed that the incentives to do so, from additional income of an estimated P43,200 earned by the SPPs (see calculations above), should be sufficient to warrant continued participation by participating SPPs. Similarly, there is little reason to assume that participating laboratories would not continue to supply sputum services, at an income of about P97,500 each earned from the Virtual DOTS Center project. *In both cases, it is assumed that SPPs and laboratories continue to provide DOTS-standard services to all patients.*

V.D. Other Sustainability Issues

Patient Participation: *The willingness of patients to be referred to the Virtual DOTS Center network and pay for the service is crucial*. Estimates of cost to the patient for the full course of treatment is estimated at P2,925 if free drugs are supplied and P4,725 if drugs are supplied at P10 per day. This compares to a range of P200 - P2,400 if a patient is referred to a health center or private DOTS center, and P6,880 – P11,380 if the patient is retained by the SPP and purchases prescription drugs. (Please refer to **Appendix D**.) Issues of affordability will best surface during the trial process.

Treatment Partners. The assumption is that the direct observation of TB patients (the "DO" in DOTS) will be performed by a network of treatment partners who are either volunteers or are paid minimum incentives, with incentive payments built in through a small service fee paid by patients. A small profit may also be assumed where low-cost drugs are sold to patients. Again, implementing agencies will have their own policies in respect to the use made of this income. A small cash contribution is, also, assumed from the program's management to cover management costs in respect to patient monitoring and case reporting.

Virtual DOTS Center Manager/Coordinator. The sustainability of the appointed project manager assumes that this would be a voluntary role. There is a wide range of potential entities, both formal and informal, where this management function may be placed. He or she may be a volunteer SPP or from the community-based agency involved in the project. It may be a formal member of a Medical Association. It may be a retired member of the medical profession or an

individual (such as a member of the Rotary Club) or a volunteer from a sponsoring commercial firm.

PhilHealth Reimbursement. It is unclear whether PhilHealth would accept reimbursement for Virtual DOTS Center patients, as they have agreed to do for private, fixed DOTS centers (providing the service is free). It is also unclear how many patients would agree to PhilHealth reimbursement. On the assumption that 20% of Virtual DOTS Center patient costs could be reimbursed at P4,000 per patient, the income gained for the project would be about P1,275 per patient or P63,750. This would help offset the losses in Sub-models "A" and "B" above (where free drug supply is assumed). If 50% of patients were reimbursable, Sub-model "A" would break even (with franchising fees). Without franchising fees, almost all patients would have to be PhilHealth reimbursable to break even, in cash flow terms.

Sponsorships. Program sustainability is, also, predicated on a level of income from commercial sponsorship or donations. In the 'worst case' model to be tested the assumption is that P261,000, or about $4,600 per annum would be required. However, if SPPs and laboratories are willing to pay 10% of their additional income as a 'franchise fee', this is somewhat reduced. Adding income from PhilHealth reimbursements, if possible, would assist sustainability. Commercial sponsorship may well be obtained from pharmaceutical manufacturers and distributors, whether they are engaged in TB drugs or not. They have a considerable interest in presenting a positive image to the community at large, and are particularly interested in being seen by medical practitioners as engaged in making positive contributions to society. They have a strong interest in getting their name and products in front of medical practitioners and may well see this as a way to do this.

*These issues will only surface completely as a result of the road shows and the level of community support that they generate. Certainly different solutions will surface within the different networks to be established in each municipal area. Significant adjustments may need to be made from these early assumptions, both before the program is launched and as a result of implementation experience. Different 'models' of sustainability will surface at each trial site for evaluation and replication***.**

V.E. Prospects for Income from Franchise Fees

The Virtual DOTS program will be testing the prospects for developing a formal 'franchising' system. Franchising is predicated on the notion that the franchiser is offering a franchisee technical support to establish a profit-making venture. The franchisee pays a fee for this technical support (usually a fixed-fee up-front and a percentage of sales) for technical inputs and training, for quality raw materials sourcing and the use of trade marks. It is supported by advertising and promotional activities supplied in support of all franchisees.

Very few franchising operations or networks in the health or family planning fields accomplish the broad definition of franchising as practiced in the commercial world. The income earned from franchise operations may be inadequate to cover the total costs of the program. In fact, many so-called “franchise” operations in development do not insist on any fees from the “franchisee”. In reality, these operations are better described as “networks” rather than “franchises”.

A further term commonly employed is “fractional franchising”, where the franchisee is undertaking a franchise, but the activity is only a part of a broader operation offering other services than those supplied by the franchise operation.

The present TB program may be termed a fractional franchise in that the SPPs and community-based entities that will implement the project will be undertaking the TB program as only a part of their total operations.

In the case of SPPs, the assumption is that their TB patient load will only be a small part of their overall practice, perhaps 7%. The realistic assumption is that the average single-practice physician will service treat only 35-45 TB patients per year.

Research clearly shows the financial constraints relating to TB patients served by SPPs and the lack of financial incentives to these providers to implement DOTS. If, in reality, DOTS was an affordable procedure and, if implemented, would adequately increase practitioners’ income, they would no doubt provide the service with no need for PhilTIPS intervention. The fact that they do not do so is already indicative of the problems faced in considering a fractional franchise that could cover all its costs, in a sustainable way, with SPPs.

Assumptions of a realistic income from franchise fees, at P500 for accredition (to marginally help cover set-up cots) and 10% of increased income (to help cover operational costs), demonstrate that less than half of the total costs of a DOTS operation could be covered from such fees. At best, therefore, such an operation may be termed a “partial, fractional franchise”. It is certainly not franchisable in the normal commercial meaning of the term, nor could set-up costs be reimbursed from future income.

The question of achieving any TB franchise fees from SPPs (or laboratories) is also moot. In reality they are being asked to reduce their TB patient income below that which they receive from all other patients. At the same time where the PhilTIPS program to develop DOTS Centers requests a P500 fee from SPPs who are certified to refer patients to DOTS Centers, there are numerous complaints about this fee from SPPs interviewed.

In order to test the viability of franchise fees the program will need to present convincing evidence that such fees are necessary to sustain the program and,

more importantly, that the SPP gains tangible and real benefits from the fee. It should be stressed that the fee is not an earned income from a profit-making franchiser but is used by the network itself, primarily for advertising, promotional activities and print materials, that will lead to increased revenues to the provider and better service. Ideally the fees should not be paid to PhilTIPS, during the trial phase, but to the local Virtual DOTS Center management. This should be presented, at road shows, in compelling graphic form. At the same time the present assumption is that fees will be paid in arrears and that for the first year (or six months) PhilTIPS funding will cover them. In this way franchisees will feel more comfortable about accepting them.

The acceptability of the payment of fees by SPPs and laboratories will, first, be tested out at road shows and may be found impractical at that early stage. Should any network agree to the payment of these fees, this system will be tested in real life and the end result evaluated for possible replication.

VI. CONCLUSION

Private, single-practice physicians comprise a large fraction of the Philippine medical community, and manage a considerable number of tuberculosis patients. However, diagnosis and management of TB patients is as varied as each individual SPP. It has been definitively proven that, to achieve control of TB, implementation of the Directly Observed Treatment Short-course, or DOTS, is essential. Thus it is imperative to have a cohesive and committed group of SPPs diagnosing and treating TB patients according to uniformly high DOTS standards, while at the same time retaining the personal, community-oriented touch that is characteristic of the single-practice physician.

Referral to public sector health centers is not a viable option for many patients. Similarly, reliance on private, fixed DOTS centers is not an alternative with which to achieve substantial coverage (not least because they are still few in number). Thus, the involvement of SPPs in direct provision of DOTS is an essential complement to services offered through the public sector. Indeed, it is the *only* guarantee that private sector health services will bear their share of the TB burden in a country where such a large percentage of the population seeks health services from private doctors.

The SPP and the patient are but two elements involved in the control of TB at the level of the community. Other stakeholders include the patient's family and friends, the pharmacist and his/her drug supply chain, and the technician in the laboratory. In most instances, NGOs and civic minded persons are also involved. These individuals and groups comprise the community whose concern is not only to control and treat TB, but ultimately to remove it as an obstacle to social and economic progress. Such communities have powerful resources that can be focused on the battle against TB, through creation of Virtual DOTS

Centers. The community tradition, at various levels, of cooperation and dedication in working together is ready to be harnessed for this purpose. A Virtual DOTS Center approach, that draws on private sector and community-based resources, and offers a range of options adjusted to the specific resources available at community levels, can make the most of this tradition.

This is the way to go. The path to TB control and cure leads through creation of a community oriented model, the Virtual DOTS Center, that supports some of its most important and respected members, single-practice physicians, in adopting and following the DOTS approach to curing TB. The model is comprehensive, since it includes all the stakeholders. It should not require the creation of a central DOTS physical structure, since facilities and capacity already exist throughout the community. In fact, the community itself *is* the "virtual" DOTS center. The task is to make certain that its many resources are appreciated and effectively utilized.

APPENDIX A

LIST OF CONTACTS and PHYSICIANS INTERVIEWED

Benedict Roma, TB Program Manager, FriendlyCare, Quezon City

Catherine “CJ” Fischer, PhilTIPS CTO; PHN Office, USAID/Philippines

Elaine Martinez-Umali, National Coordinator, Kusog Baga Project, World Vision

Marilou Ebin Pellosis, Committee of German Doctors for Developing Countries

Dr. Madeleine Valera, Vice President, PhilHealth

Dr. Lynn Vianzon, Program Manager, National Tuberculosis Program, DOH

Dr. Jennifer A. Mendoza-Wi, Head, TB Program, Villaflor Hospital, Dagupan City

Dr. Juan A. Perez III, Chief of Party, PhilTIPS

Alma D. Porciuncula, Deputy COP, PhilTIPS

Dr. Rodrigo C. Romulo, Technical Coordinator, PhilTIPS

Elizabeth A. Bassan, Sr. Vice President, International Health Group, Chemonics

Marilou P. Costello, Health Systems Analyst, PhilTIPS

Dr. Charles Yu, Chairman, PhilCAT

Melita Caldoza, Office Manager, PhilTIPS

Wilfredo Verzosa, Franchise Manager, United Laboratories, Inc.

Rafael Hizon, Hizon Laboratories, Inc.

Troy Tibe, Pfizer Laboratories, Inc.

Ted Lim, Entrepreneur, Cebu City

Dr. Wilfredo Varona, UNICEF Consultant

Janet W. Estranero, VP for Sales and Operation, Biogenerics Philippines

Armando C. Esguerra, Management Consultant, Manila

James Dio, General Manager, Therapharma Philippines

PHYSICIANS INTERVIEWED

by Single-Practice Model Development Team

		Single-Practice Physician	
MD Name	Location	Community	Hospital
1. Jewel Ann Abella	Labangon, Cebu City	Yes	*
2. Ma. Lourdes V. Pama	Tabu-an, Cebu City	Yes	*
3. Romeo Bigornia	Chong Hoa Med Ctr., Cebu City	*	Yes
4. Edgardo G. San Juan	Punta Princesa, Cebu City	Yes	*
5. Alejandro S. Montejo	Basak, Cebu City	Yes	*
6. Ma. Estela Polentinos	Labangon Residence, Cebu City	Yes	*
7. Edisa Ermac	Mandaue City	Yes	Yes
8. Ma. Cristina D. Gravador	Mandaue City	Yes	Yes
9. Antonio G. Dizon	Balibago, Angeles City	Yes	
10.Hernand B. Tulud	Angeles City Hall	Yes	Yes
11. Zenaida R. Castro	Burgos St., Angeles City	Yes	*
12. Gertrudes S. Canono	Burgos St., Angeles City	Yes	*
13. Sesnando S. Sandalo	Pampang Road, Angeles City	Yes	*
14. Gary Carlos	De La Salle Hospital, Cavite	*	Yes
15. Fedelinda. E. Ilano	De La Salle Hospital, Cavite	*	Yes
16. Helen S. Siqua	Quezon City	Yes	*
17. Vincent Balanac	Lung Center, Quezon City	*	Yes
18. Israel Chavez	Mega Mall, Mandaluyong	Yes	Yes
19. Romeo P. Ariniego	Dasmarinas, Cavite	*	Yes
20. Dang Roderno	Indang, Cavite	Yes	*
21. Allen Pacaide	Area G, Dasmarinas, Cavite	Yes	*
22. Florencio Santos	Ind'l. Clinic, Dasmarinas, Cavite	Yes	Yes
23. Lalaine Nicolas	Gen. Trias, Cavite	Yes	*
24. Diana Josephine Santos	Yasaki Anabu, Imus, Cavite	Yes	*
25. Shirley Ramirez	Imus, Cavite	Yes	*
26. Shiela Tan Marino	Candelaria Clinic, Quezon	Yes	Yes
27. Maria Reyes	Tayabas, Quezon	Yes	*
28. Avelino Obispo	Tayabas, Quezon	Yes	Yes
29. Violeta Reyes	Lucena City	Yes	Yes
30. Severina Reyes	Tayabas, Quezon	Yes	*
31. Erlinda Caparros-Plotria	Chest Center, Lucena City	*	Yes (Public)
32. Ohliva A. Deocampo	Imus Cavite	*	Yes (Public)
33. Alex Miranda	Bacolod City	Yes	*
34. Nida Israel	Bacolod City	Yes	Yes
35. Regio Sales	Bacolod City	Yes	*
36. Andy Gumban	Bacolod City	Yes	Yes
37. Daniel Trajera	Bacolod City	Yes	Yes
38. Roro Frias	Cagayan de Oro	*	Yes
39. Jojo Tancoco	Cagayan de Oro	*	Yes
40. Gerry Casino	Cagayan de Oro	Yes	Yes
41. Renmar Natividad	Cagayan de Oro	Yes	Yes
42. Helen Sigua	Quezon City	Yes	*

43. Vince Balanac	**Quezon City**	*****	**Yes**
44. Cholly Obillo	**PCCP, Quezon City**	**Yes**	**Yes**
45. Ong Mateo	**PCCP, Quezon City**	**Yes**	**Yes**
46. Noel Bautista	**PCCP, Quezon City**	**Yes**	**Yes**
47. John Dalisay	**PCCP, Quezon City**	**Yes**	**Yes**
Caridad Diamante	Lucena City, Quezon	RHU	
Nelson Palayan	Tayabas, Quezon	RHU	
Dr. Brual	Airport, handles DOTS Clinic, Central Azucarera de Don Pedro, Batangas		
Tabu-an Health Center Staff	Tabu-an, Cebu		

APPENDIX B

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APPENDIX C

Detailed Outline of "Road Show"

The road show program will bring together those identified from the site visits and those responding to mailings. It will NOT serve as a training vehicle, but will rather be a program design mission, that will:

1. Explain that the purpose of the meeting is to establish a service to TB patients through SPPs.

2. Explain the details and rationale for DOTS.

3. Frankly explain what processes are presently employed by SPPs to diagnose and treat TB patients, why it needs to be improved, and why DOTS is the best approach, provided through the Virtual DOTS Center..

4. Frankly discuss the constraints that SPPs face in providing a full DOTS service and why the present, national strategy to provide DOTS through health centers and DOTS Centers cannot adequately service the needs of all private sector patients; that SPPs themselves need to be involved in the delivery of DOTS so that all patients in the Philippines can be covered.

5. Discuss how SPPs can better implement DOTS for all their patients – the need for SPPs to appreciate that without sputum testing, diagnostic protocols are not adequate, hence the establishment of a Virtual DOTS Center. The need for SPPs to refer sputum negative patients to a Diagnostic Committee. Address need for certified, approved testing facilities.

6. Discuss importance of community-based treatment partners and patient management protocols to cure.

7. Discuss the establishment of groups of SPP participants in the Virtual DOTS Center (about 10); the need for at least 2 approved testing sites and the need for about 23 patients to be visited per day to meet the treatment case management protocols (described).

8. Discuss how all this is to be managed and paid for through the Virtual DOTS Center, the additional income to go to an average SPP and to an average laboratory.

9. Discuss a small charge to be levied on the patient for door-to-door treatment protocol services. If at P2 per day X 24 patients = P48 per day. If at P5 per patient = P120 per day.

10. Discuss the concept of provision of drugs through the community-based SPP, especially to those patients who cannot afford prescription drugs (generic at about P25 up to P60 per day). Discuss the choice of drugs that can be offered: either free public sector drugs, a special P10 per day drug, or both, for the patient to choose depending on the combination being tested. Explain that drug sales of the P10 special drug would earn an additional income of P2 per day per patient to the field-based operation.

11. Explain the management and paperwork issues relating to the field-based operation.

12. Explain the funding to be provided to establish the network – orientation / training for SPPs; training of laboratory staff; training of community-based operations. Program logo / signage for each component site; advertising and promotional activities for first year; posters and brochures for SPPs and for community-based field-workers; some modest assistance with equipment needs of community-based workers and the management of them (basic transport, computer, assistance with computerizing patient records).

13. Review process of referral and patient management (refer to approved laboratory for tests); referral to a Diagnostic Committee or approved Second Opinion physician if sputum tests negative; referral to community-based patient management system, return to physician after two weeks and monthly thereafter and process for defining treatment to cure.

14. Discuss options for establishing a functioning coordination and management group with one member (either an SPP or a laboratory manager or a community-based person or an outside willing member to act as Chairman of the Management Group. Discuss monthly (?) meetings. Discuss plans for yearly meetings between Groups in each Province at a later date when more are established.

15. Discuss potential role of SPPs. Would they like to act as one group to arrange and manage the whole network, appointing one of themselves as the network manager, or would they prefer someone else? Discuss whether SPPs would like to motivate and arrange community-based treatment activities or would they prefer that another entity did this.

16. Discuss with SPPs and laboratory members, would they be willing to contribute a small fee (say P500) to be a certified as a DOTS physician? Would they be willing to add 10% of the additional income they will earn from the added patients they will likely receive (detail again) to help support the management of the network. Discuss that the project will pay this for the first year, the issue is how to sustain the effort in future years. Note that the funds will go to the volunteer Network manager for payment of future expenses of Network management particularly advertising and promotion of services,

provision of materials, and arranging meetings (including the first fee of P500).

17. If there is a clear refusal, ask would they pay a lessor fee. If still refuse to be involved continue anyway.

18. Whether refused or not state that the program will seek commercial sponsorship of promotional activities.

19. Discuss with community people present: What do they think about the practicalities of managing the community-based treatment partner and patient management issues? What do they think about providing drugs (is practical / is possible). What do they think about the income. Adequate? Or not?

20. Request interest in attending a future meeting.

APPENDIX D

Cost to Patient of a range of Service Options

Patient		Cost / Pesos
1.	Referred to health center after one consultation and no sputum test (x-ray may be added)	P200
2.	Referred to health center after three sputum tests and two consultations and does not return	P790
3.	Referred to health center after three sputum tests and two consultations and returns for 6 more consultations	P2,190
4.	Referred private DOTS Center does not return	P200 – P1,200
5.	Referred to private DOTS Center returns for 7 more consultations	P1,600 – P2,400
6.	Referred to Virtual DOTS Center community-services after 3 Sputum tests, free drugs, P5 fee per day, returns for 7 consultations and 3 sputum tests	P2,925
7.	Referred to Virtual DOTS Center community-services after 3 sputum tests, drugs and fee at P10 / day, returns for 7 consultations and 3 sputum tests	P4,725
8.	Retained by SPP for full service: 6 sputum tests, 8 consultations and prescribes generic drugs	P6,880
9.	Retained by SPP for full service: 6 sputum tests, 8 consultations and prescribes branded drugs	P11,380

Cost Assumptions

Service	Pesos	Note
Consultation fee	200	Actual varies between P100 – P300
Health Center	Free	Some donation fee sometimes requested / paid
Sputum test	130	Discounts may be negotiated. Some SPPs may add x-rays and charges additional.
Private DOTS center	Free	Some charge P1,000 full service; some other small fee
Virtual DOTS center		
• Drug	P10	For drugs and service fee (An alternative option of drugs at P10 per day and service fee of P5 per visit may be feasible)
• Service Charge	P5	If drugs free
Generic comm. drugs	P25	If generic
Branded comm. drugs	P50	Actual range P40 – P60

DOTSLink – Single-practice Physician's Network

Part 2: Implementation Plan for Pilot Project

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I. Introduction

New statistical data from the 2004 Burden of Disease study has shown the long-term damaging effects of tuberculosis on the Philippine economy. The estimated losses in wages due to TB is over Php 8 billion (US$144 million) annually. In contrast, spending for TB treatment is only Php 198 million (US$ 3.6 million). Despite this budgetary limitation, the DOH has taken concrete steps to widen the scope of its anti-TB campaign through the greater involvement of the private sector in providing primary health care under the DOTS program.

The DOH's National Tuberculosis Program (NTP) has responded vigorously to this challenge, in recent years achieving impressive results in cure rates for patients treated in public health facilities. However, private health services, which deliver a major portion of the country's health care, have lagged behind. While in recent years the public sector has achieved a success rate of close to 90% in curing TB patients, the corresponding rate for the private sector is no more than 50%.

Clearly, an essential element in reducing the burden of TB in the Philippines is more effective involvement of the private sector as a partner of government in curing and preventing the disease. The PhilTIPS project of Chemonics International, funded under a USAID contract, contributes in numerous ways to this effort. Its core mandate is developing approaches to private sector delivery of DOTS, designated by the World Health Organization (WHO) as the most effective treatment regimen for TB and adopted as treatment policy by the DOH. PhilTIPS is doing this by developing private DOTS Centers; supporting hospital-based delivery of DOTS services; testing NGO, pharmacy, and workplace DOTS models; and other initiatives.

In January 2004, a team of consultants conducted a rapid appraisal to explore approaches to more effective involvement of private Single Practice Physicians (SPPs) in incorporating the DOTS regimen into their routine treatment of TB. A series of focus group discussions also provided insights into the possible roles of various stakeholders in a DOTS network. In the Philippines, a high percentage of people, even those of modest means, seek health care from private practitioners. It was found out that: 1) there are an estimated 12,000 to 15,000 SPPs in the country; 2) they are typically trained as general practitioners or family physicians; 3) approximately 20% of them dispense some medicines in their clinics; 4) few have an in-house lab but all have access to microscopy and x-ray facilities; 5) most have approximately 3 or more TB patients per month; and, 6) they may be uninterested in the administrative processes involved in DOTS.

II. SPP-DOTSLink: Enabling SPPs to Deliver DOTS

A limitation of the current models for DOTS delivery is the fact that they are largely facility-based. Such a configuration makes it difficult for SPPs outside or far from the facilities to deliver the DOTS protocol.

The SPP-DOTSLink is a referral system to be used by a group of private physicians, diagnostic labs, treatment coordinators, and other health service providers to deliver the various services necessary for DOTS. SPP-DOTSLink will harness private sector participation in the areas of clinical out-patient care, diagnosis, testing, drug supply and treatment.

In SPP-DOTSLink, there will be affiliates who are existing local health services providers such as diagnostic labs, clinics, pharmacies, health NGOs, and other health-related organizations and enterprises. A DOTSLink Case Manager shall coordinate the activities of the affiliates. The patients enter through one DOTSLink-affiliated facility and move seamlessly accessing DOTS services through the DOTSLink network until they are diagnosed as cured by the attending physician. Patients are not only assured of treatment but also of quality care and service by properly trained and accredited physicians, treatment partners, pharmacists, and laboratories who are affiliated with SPP-DOTSLink.

II. Objectives and Overall Design of the SPP-DOTSLink Pilot Project

The SPP-DOTSLink Pilot Project will have the following main objectives:

1. to develop a system that allows single-practice physicians to deliver DOTS to private patients
2. to document the pilot project and prepare for expansion and replication of the project in other sites
3. to institutionalize the DOTSLink system in local and national health delivery systems

The SPP-DOTSLink Pilot Project shall be implemented under Operations Research and Model Development (Tasks 2 and 3) in the *Work Plan for Year 2 in the Philippine Tuberculosis Initiatives for the Private Sector Project* project document.

Implementing the pilots for SPP-DOTSLink involves three components:

1. The establishment of DOTSLink Central Office, which deals primarily with the logistical requirements necessary for a central coordinating body to be properly established. It covers the initial set-up stages up to the administration and management stages. National and regional advocacy shall be undertaken from this office.

2. SPP-DOTSLink shall be piloted in two sites. Piloting involves mobilizing local actors in the sites and developing, implementing, and debugging the DOTSLink system.

3. The Monitoring and Evaluation component keeps track of the operations of SPP-DOTSLink in the delivery of DOTS to a target community. It also concurrently deals with the operations of SPP-DOTSLink Central Office at PhilTIPS in carrying out its mandate to monitor and evaluate the SPP-DOTSLink networks.

A. Set-up of SPP-DOTSLink Central Office

An SPP-DOTSLink Central Office shall be established at the start of the pilot and located within the PhilTIPS Office at PSE Building. The functions of this office are: select sites for pilot models; set-up the local SPP-DOTSLink networks; coordinate activities of SPP-DOTSLink partners; facilitate the training and certification process; render administrative support; and monitor and evaluate local SPP-DOTSLink network. The PhilTIPS will be responsible for establishing SPP-DOTSLink Central Office.

The staff and officers shall be sourced from the available pool of local experts and able professionals. The officers shall carry out the policy formulation and coordination functions of the central office while the staff shall be responsible for the day to day administrative matters of running the office.

Most of the start-up activities involved will be conducted in the initial months prior to the launching of SPP-DOTSLink and followed by regular periods of activity throughout the SPP-DOTSLink operations research period.

Advocacy and institution-building efforts shall be pursued from the DOTSLink Central Office.

Table below outlines the systems and roles of the individuals in the SPP-DOTSLink Central Office:

Table 1: Personnel Roles and Responsibilities

Job Title	System	Scope of Work
Network Director and Manager - Direct and Manage the SPP-DOTSLink in its objectives based at the PhilTIPS Office in 1608 West Tower, PSE Building Exchange Road, Ortigas Center -Reports directly to the PhilTIPS Health Systems Adviser	Management System	Working in close consultation with the PhilTIPS Health Systems Adviser, will - Evaluate potential sites and recommend sites for pilot implementation - Directs and manages the design and development SPP-DOTSLink systems - Responsible for setting-up SPP-DOTSLink local clusters - Develop business plans for the respective partners in the pilot sites - Ensures and motivates SPP-DOTSLink staff to effectively and efficiently carry out their responsibilities - Through the DOTSLink Field Manager, regularly evaluates the status of SPP-DOTSLink field operations, ensuring that they meet expected outcome - Monitor and evaluation of the project using standard indicators described in the NTP guidelines and consistent with TIPS PMP.
	R & D System	- Responsible for the creation and development of new strategies and services that can be utilized for SPP-DOTSLink
Operations Officer - reports to and is accountable to the Manager -works directly with communities' SPPs and organizations	DOTSLink Operating System	- assists in profiling sites for the setup SPP-DOTSLink Clusters - Putting up the Road shows to gain the community's interest - Stays in regular contact with the areas by phone, e-mail, or site monitoring to identify problems, answer questions, and bring solutions and new ideas directly to the areas -Regularly inspect the SPP-DOTSLink affiliates, discusses any deficiencies, & makes recommendations for improvement -Reports regularly to the Network Director and Manager
Communications and Marketing Officer - reports to and is accountable to the Network Director	Advocacy and Communications System	- Acts as the trainor to the field partners on the DOTSLink System - Helps SPP-DOTSLink affiliates in the various areas improve the performance of their operations - Implements quality control and improvement systems - Stays in regular contact with the areas by phone, e-mail, or site monitoring to identify

Job Title	System	Scope of Work
		problems, answer questions, and bring solutions and new ideas directly to the areas - Manages local training of the SPPs and organizations involved
Field Manager - reports to and is accountable to the Network Director -works directly with communities' SPPs and organizations	Start-up and monitoring systems	- Directs and manages the development of DOTSLink system; is the link of the local network to the SPP-DOTSLink Central Office at PhilTIPS - Ensures that all partners accreditation requirements are met; as well as motivates affiliates to effectively and efficiently carry out their responsibilities - Facilitates communication between all affiliates and health units through regular consultation meetings - Studies the reports from the affiliates and makes recommendations to the Central office - Looks for a case manager to recruit and train treatment partners if needed. -Coordinates with community members to promote SPP-DOTSLink and solicit support. - Monitors the providers to ensure timely submission of reports and updates - Works with Central Operations Officers to evaluate and monitor patients and affiliate members - Prepares the regular reports for the SPP-DOTSLink Central office - Conducts additional training if needed
PhilTIPS support Consultative group will be convened by HAS composed of PhilTIPS technical team. Administrative support for Tasks 2 and 3		- integrates latest PhilTIPS outputs with SPP-DOTSLink - Gives suggestions and guidelines on how the SPP-DOTSLink clusters should work - Gives support/service - Comes up with different scenarios that will help the SPP-DOTSLink market its product

B. Setting Up the SPP-DOTSLink System

The following will be the activities in implementing the SPP-DOTSLink systems. Each site will undergo the same processes. These processes will be

implemented in series across the pilot sites, when possible, so that lessons learned from the first few sites will serve as an input into the newer sites.

1. Sending out road show invitations

Field Managers will send out road show invitations to all potential partners among the community's SPPs, NGOs, POs, other organizations, and individuals.

2. Road show

The SPP-DOTSLink Central Office staff and Field Managers will present the SPP-DOTSLink network concept to the community. This is the venue for them to gain the community's support, as well as the essential partnerships among the SPPs. As they present the design and processes behind the SPP-DOTSLink network, the potential partners will see how they may be part of the program.

Memorandums of Interest from those already willing to be partners may be received as well during this time.

3. Meetings and batch orientation. In case some organizations may require more time to discuss SPP-DOTSLink within their own organizations, the Field Manager is tasked to meet with them again for further orientation. Strengthening of the DOTS systems of the Department of Health regional offices may also be done at this point.

4. Signing of Memorandum of Agreement (MOA)

When potential partners have signified their assurance to join the SPP-DOTSLink Network Alliance, a Memorandum of Agreement will be drawn up and signed. The next phase cannot begin unless the required number of SPPs, other health providers, and organizations have committed to the network.

By the end of the recruitment process, partners would have signed either memoranda of interest or MOAs committing to the SPP-DOTSLink Pilot and the key stakeholders should have an increased awareness about SPP-DOTSLink in their community.

5. Training Potential Affiliates of SPP-DOTSLink

The affiliates need to build a deeper understanding of the SPP-DOTSLink network concepts to acquire a certain sense of responsibility and confidence to manage the system. A series of training seminars shall be provided to the SPP-DOTSLink affiliates.

The following modular trainings will be given to build up the knowledge, skills, and attitude of the local partners:

Table 2: Topics that will be Tackled by Various Affiliates in a Pilot Site

TOPIC	SPP	MC	CM	Rx	C / IG
1. Philippine state of health, TB, and the PhilTIPS framework	▲	▲	▲	▲	▲
2. SPP-DOTSLink network	▲	▲	▲	▲	▲
3. Treating, monitoring, and reporting of TB patients	▲	▲	▲		
4. Training and certification procedure	▲	▲	▲	▲	
5. PhilHealth benefit package	▲	▲	▲	▲	▲
6. Basic anti-TB course for small communities					▲

Legend:

SPP – Single Private Practitioner
MC – Microscopy Center
CM – Case Manager
TP – Treatment Partner
C – Community representatives or officials
Rx – Pharmacy/Drugs
IG – Interest groups or community members
▲ – must undergo training on SPP-DOTS modules

Modular learning kits shall be developed and tested during the pilot phase in preparation for the replication phase.

6. Advocacy campaign

For an SPP-DOTSLink network to work and be sustainable, it needs to have a large patient base that is actively participating in the program. Therefore, an advocacy strategy aimed at promoting DOTSLink to be implemented to elicit support and participation from both the community members and possible patients. This task shall be pursued in partnership with other IEC and advocacy initiatives of PhilTIPS. The campaign must have the following elements:

1. Behavior change communication - Information and advocacy materials will be developed and distributed to increase DOTS understanding and acceptance.
2. Public relations and networking - Efforts will also be done to send out regular press releases, special stories and press briefings. Events and TB/ DOTS experts will be given opportunities for media coverage.
3. The SPP-DOTSLink road show - Targeted participants (e.g. local government units, community organizations, etc.) shall be invited to an activity which shall develop among them stronger orientation towards the DOTS. Subsequently, this system of the SPP-DOTSLink shall be introduced and its merits presented to the participants.

The Field Manager shall promote SPP-DOTSLink among different communities and networks.

The advocacy campaign aims to build awareness through the following:

- Extensive print efforts in local media
- Promotion in DOTSLink events and activities
- Other locally available non-traditional media will be tapped to ensure continuous visibility among target markets

7. SPP-DOTSLink Dry-run and Launch

The DOTSLink system needs to be tested prior to its actual implementation to determine some lapses or errors in the system and corrective measures can be recommended immediately. The dry run shall last for a few days during which the Field Manager will assist the SPP-DOTSLink affiliates.

The SPP-DOTSLink Central Office at PhilTIPS will monitor the dry run through the Field Manager . The Field Managers will list down errors and elicit feedback. A feedback mechanism is necessary for the overall evaluation of the performance of the SPP-DOTSLink network. The SPP-DOTSLink will be evaluated according to these criteria:

- Time it takes to complete the whole process
- Patient satisfaction
- Efficiency and flow of the patient referral system
- Quality of treatment partners
- Availability of necessary supplies and medicines

Once the affiliate have successfully implemented the system during the dry run, the system will be deemed to have passed the standards and shall formally be launched as a functional Local DOTSLink Cluster. From this point onwards, the SPP-DOTSLink affiliates will be given full responsibility for carrying out the processes involved in DOTSLink system. SPP-DOTSLink Central Office at PhilTIPS shall then begin to monitor and evaluate the affiliates.

C. Monitoring

Along with the establishment of an SPP-DOTSLink network by the PhilTIPS Central Office, the Field Manager shall be tasked to carry out the area-specific functions of coordination and network promotion such as monitoring and evaluation.

Each DOTSLink affiliate, including the Field Manager will be required to submit regular reports to either the Field Manager or SPP-DOTSLink Central Office at PhilTIPS. The frequency of the reports shall generally be every three months. However, during the pilot stage, all affiliates and the Field Manager shall be required to submit reports *every month* in order to debug the systems faster.

Table 3: Reports and Frequency of Submission by Members of the Cluster in Maintenance Phase

Report/Presentation	Report for	Schedule
SPP's quarterly report	Network Director	Every 3 months
Laboratory quarterly report	Network Director	Every 3 months
Pharmacy report	Network Director	Every 6 months
Treatment coordinator report	Network Director	Every month for 1st 6 months; afterwards, every 3 months.
SPP-DOTSLink network quarterly report	HSA and PhilTIPS	Every 3 months
SPP-DOTSLink network mid-year report	HSA and PhilTIPS	Every 6 months

The Field Manager shall be responsible for receiving and processing the reports sent to them by the affiliates. The DOTSLink Central Office shall analyze the processed reports and make recommendations or suggestions to either the concerned affiliate for the affiliate's improvement.

Aside from receiving reports, the Field Manager is tasked with monitoring compliance and quality of services by affiliates. They are authorized to do this in behalf of the DOTSLink Central Office, and shall do so by conducting random site inspections and soliciting feedback from the patients and treatment partners. The Field Manager must personally coordinate with affiliate members in a regular consultation meeting to discuss concerns and good practices among the network affiliates. The schedule of this regular meeting should be agreed upon by all network affiliates.

D. Evaluation of Pilot Phase

By the fourth month, the DOTSLink Central Office at PhilTIPS, shall start evaluating the results of the pilot, identifying gaps and revising the systems for replication. The DOTSLink Central Office staff, through the Health Systems Adviser shall coordinate closely with other PhilTIPS Task Advisers to ensure compatibility of the SPP-DOTSLink with other systems.

The replication process is anchored on the learning experience of SPP-DOTSLink models and the nature of alliance and coordination of previous DOTS service models.

Monitoring and evaluation shall look into process, output, and outcome indicators and shall begin immediately after launch. By the end of the fourth month, early findings shall be analyzed in order to prepare for the decision to replicate the model. A partial list of indicators to be monitored are listed in Tables 4-A and 4-B.

Table 4-A: Tentative Indicators for SPP-DOTSLink Pilot Effectiveness by Key Result Area

Key Result Areas	Process indicators	Output indicators	Outcome indicators

Developing Linkages	- Adoption of referral systems
	- Dynamism in the network
	  o New members
	  o Increasing geographical reach
	  o No of meetings
	- Investment in network expansion
		- No of affiliates with MOA	- Emergence of other DOTS-related initiatives triggered
			- Institutionalization with PHIC, DOH, LGUs, NTP
			- Start up/suppport RCC

Service quality	- adoption of NTP-DOTSLink treatment protocols and standards	- reduced default rates - reduced no. of complaints	-
Treatment effectiveness	- adoption of NTP treatment protocols and standards	- Increased case loads - Total enrolled patients - No. of sputum exams done	- reduced incidence rates - increased case finding rates - Increased DOTS patients reported in registry - Reduced default rates

Table 4-B: Tentative Indicators for SPP-DOTSLink Pilot Effectiveness by DOTS Process

	Station	Process indicators	Output indicators
1	First Consultation	▪ Referral into DOTSLink system	▪ Phase out of self-administered TB treatment, increase in DOTS referrals
2	Orientation and Sputum Smear testing	▪ Accreditation of microscopist ▪ Affiliation with accredited microscopist ▪ Adoption of referral form	▪ Smear test utilization
3	Orientation on DOTS and chest x-ray	▪ Adoption of orientation module	▪ No. of patients and partners oriented on DOTS
4	Recording of Patient's name in TB registers	▪ Use of voucher as source document	▪ Increase in TB cases on DOTSLink
5	Orientation of patient and Treatment Partner	▪ Use of NTP-DOTSLink orientation module ▪ Finding of treatment partner through DOTSLink directory	▪ Patient and treatment coordinator
6	Availment of Medicine	▪ Use of DOTSLink voucher	▪ Increased volume
7	Direct Observation of TB patient treatment	▪ Use of NTP-DOTSLink forms	▪ Correct recording
8	Repeat Check-up	▪ Update of NTP-DOTSLink forms	▪ Continued use of DOTSLink information system
9	Sputum Testing	▪ Adoption of referral form	▪ Smear test utilization
10	Repeat Check-up	▪ Adoption of referral form	▪ Continued use of DOTSLink information system
11	Monitoring and Reporting to Case Manager	▪ Use of NTP-DOTSLink reporting system	▪ Reports and database up-to-date
12	Medicine Supply Status report to Case	▪ Use of NTP-DOTSLink reporting system	▪ Inventory levels up to par with standards

	Station	Process indicators	Output indicators
	Manager		
13	Preparation of reports and recommendations	▪ Use of NTP-DOTSLink reporting system	▪ No. of reports using NTP-DOTSLink
14	Default Tracing	▪ Use of NTP-DOTSLink default tracing system	▪ Prompt response for defaulters ▪ Increased re-enrollment for defaulters
15	Case Management	▪ Use of DOTSLink information systems	▪ no. of patients enrolled in DOTSLink

Table 5: Project Workplan

Tasks	Jan				Feb				Mar				Apr				May				Jun			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A. Set up SPP-DOTSLink Central Office																								
Hire a DOTSLink Network Director-Project Manager																								
Hire a DOTSLink Communications and Marketing Officer																								
Hire a DOTSLink Operations Officer																								
Formulate detailed operational plans																								
Develop clear administrative plan and internal evaluation mechanism																								
Systems Design and Debugging																								
Advocacy and Networking to National and Regional Agencies																								
B. Set-up DOTSLink System																								
Site Preparation																								
Touch Base with Potential Champions																								
Identify Potential Case Management Units																								
Engage Start Up Field Managers																								
Touch Base with Local DOH and Key Partners																								
Develop partnerships with health providers																								
Send out invitations to road show																								
Meetings and batch orientations (road show)																								
Recruit potential partners																								
Training																								
Intensive modular training																								
Identify Case Manager																								
Local Advocacy campaign																								
Behavioral Change Communication																								
Public Relations and Networking																								
DOTSLink Roadshow																								
Dry run and launch																								
Simulated consultations																								
Launch																								
C. Monitoring and Evaluation																								
Conduct regular monitoring																								

Tasks	Jan				Feb				Mar				Apr				May				Jun			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Submission of reports by the Case Manager																								
Program Indicator Development																								
Assess and evaluate pilot program																								
Formulate recommendations for future replication																								
Design the replication guidelines																								

Table 6-A: Summary of Project Expenses

Chemonics International Inc. Tuberculosis Initiatives for the Private Sector Contract No. 492-C-00-02-00031 Tasks 2 and 3 - SPP Operations Research and Model Development	
Cost Category	**Grand Total**
I. Salaries	
Long-Term Local Specialists	
Short-Term Expatriate Specialists	
Short-Term Local Specialists	48,400
Home Office Technical and Administrative Specialists	12,000
Local Support Staff	9,600
13th month bonus	5,833
Total, Salaries	$75,833
II. Fringe Benefits (Base = Salaries)	
Total, Fringe Benefits	
III. Overhead (Base = Salaries + Fringe)	
Total, Overhead	
IV. Travel, Transportation, and Per Diem	$41,760
Total, Travel, Transportation, and Per Diem	$41,760
V. Other Direct Costs	
Total, Other Direct Costs	
VI. Training	$15,000
Total, Training	$15,000
VII. Subcontracts	
Clapp & Mayne (All CLINS)	
New Jersey Medical School National TB Center (CLINs 3 & 5)	
PhilCAT (CLIN 5)	
Policy Cluster Discussions (CLIN 1)	
Providers Study (CLIN 2)	
Situation Analysis I (CLIN 2)	
Pharmacy Model IEC Trade Audit (CLIN 2)	
PBSP (CLIN 3)	
ICS Market Research (CLIN 5)	
BOA Comm TOs (CLIN 5)	
Total, Subcontracts	
VIII. DOTS Fund for Public-Private Collaboration in Eliminating TB	
Total, Grants	
Subtotal Items, I-IX	
IX. General and Administrative	$2,400
Information System Development	8000
Subtotal Items, I-X	$10,400
X. Fee	
Total, Fee	
GRAND TOTAL	$142,993

Table 6-B: Monthly Project Expense

Cost Category		January-05	February-05	March-05	April-05	May-05	June-05	**Grand Total**
A.	Salaries	8,667	13,433	13,433	13,433	13,433	13,433	75,833
B.	Fringe	-	-	-	-	-	-	-
C.	Overhead	-	-	-	-	-	-	-
D.	Travel, Transportation, and Per Diem	6,960	6,960	6,960	6,960	6,960	6,960	41,760
E.	Other Direct Costs	-	-	-	-	-	-	-
F.	Training	1,500	4,500	3,000	3,000	1,500	1,500	15,000
G.	Subcontracts							-
H.	Grants							-
I.	General and Administrative	400	4,400	4,400	400	400	400	10,400
J.	Fee							-
GRAND TOTAL		**$17,527**	**$29,293**	**$27,793**	**$23,793**	**$22,293**	**$22,293**	**$ 142,993**

Table 6-C: Levels of Effort

Cost Category	January-05	February-05	March-05	April-05	May-05	June-05	**Grand Total Year 2**
I. Long-Term Local Specialists							
Total, Long-Term Local Specialists							
II. Short-term Expatriate Specialists							
Total, Short-Term Expatriate Specialists							
III. Short-term Local Specialists	1	2	2	2	2	2	11
Subtotal, short term local specialists							
Total, Short-Term Local Specialists	1	2	2	2	2	2	11
IV. Home Office Technical and Administrative Specialists	2	2	2	2	2	2	12
Total, Home Office Technical and Administrative Specialists	2	2	2	2	2	2	12
V. Local Support Staff	2	2	2	2	2	2	12
Total, Local Support Staff	2	2	2	2	2	2	12
Total, Level of Effort	5	6	6	6	6	6	35

DOTSLink – Single-practice Physician's Network

Part 3: Strategies, Design, and Project Plan for the SPP-DOTSLink Network (Virtual DOTS for Single Practice Physicians)

17 June 2004

Executive Summary

TB has been on the decline in recent years thanks to the sustained efforts of both public and private agencies through the advocacy of DOTS or Directly Observed Treatment Short-course. Yet, in spite of these efforts, more must be done to combat this widespread disease. With the successful development of Government programs against TB, the next logical step is to integrate the larger private sector in the fight against Tuberculosis.

In the Philippines, the DOH has taken the initiative in involving the private sector through DOTS by formulating policies and programs aimed at attracting the thousands of private physicians towards a sustained anti-TB campaign. New models for Single-Private Practitioners and other health providers have been developed through the help of coalitions such as the Philippine Coalition Against Tuberculosis (PhilCAT) and technical agencies including the Philippine Tuberculosis Initiatives for the Private Sector (PhilTIPS).

This paper has been made in line with the ongoing campaign to develop a model for SPP using DOTS. What is presented here is a revision of the already proposed “Virtual DOTS Model.” The revised areas are aimed to fall in accordance with a more acceptable form of SPP-DOTS for private health providers. Thus, the paper is divided into two parts focusing on: a strategy for establishing a SPP-DOTS Model and the implementation of a SPP-DOTS model through SPP-DOTSLink.

The project has been made possible through Chemonics International and PhilTIPS under a grant from the DOH and USAID.

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INTRODUCTION

New statistical data from the 2004 Burden of Disease study has shown the long-term damaging effects of Tuberculosis on the Philippine economy. Over Php 8 billion (U.S. $144 million) is the estimated cost in loss in wages due to Tuberculosis annually. In contrast, spending for TB is only Php 198 million (U.S. $ 3.6 million). Despite this, the Department of Health has taken concrete steps to widen the scope of its anti-TB campaign through the greater involvement of the private sector in providing primary health care under the DOTS program.

According to the Philippines Department of Health (DOH), tuberculosis kills an average of 75 Filipinos every day. The World Health Organization (WHO) ranks the Philippines eighth in the world in estimated incidence of tuberculosis (TB), which in 2002 stood at roughly 330 per 100,000 people. This may even be an underestimate, due to the fact that many persons do not seek medical attention for their illness, for fear of the unique stigma with which TB sufferers have historically been branded. In both economic and social terms, tuberculosis represents a major obstacle that must be overcome if Philippine national development is to fully flourish.

The DOH's National Tuberculosis Program (NTP) has responded vigorously to this challenge, in recent years achieving impressive results in cure rates for patients treated in public health facilities. Private health services, however, which deliver a major portion of the country's health care, have lagged behind. While in recent years the public sector has achieved a success rate of close to 90% in curing TB in its patients, the corresponding rate for the private sector is no more than 50%. Clearly, an essential element in reducing the burden of TB in the Philippines is more effective involvement of the private sector as a partner of Government in curing and preventing the disease.

The Tuberculosis Initiatives for the Private Sector (PhilTIPS) project of Chemonics International, funded under a USAID contract, contributes in numerous ways to this effort. Its core business is developing approaches to private sector delivery of Directly Observed Treatment, Short-course, or DOTS, designated by the WHO as the most effective treatment regimen for TB and adopted as treatment policy by the DOH. PhilTIPS is doing this by developing private "DOTS Centers", supporting hospital-based delivery of DOTS services, testing NGO, pharmaceutical and workplace DOTS models, and other initiatives.

In January 2004, PhilTIPS asked a team of consultants (Putnam, et.al.) to explore approaches to more effective involvement of private, single-practice physicians in incorporating the DOTS regimen into their routine treatment of TB. In the Philippines a high percentage of people, even those of modest means, seek health care from private practitioners. Of these the largest percentage is represented by "single practice physicians" or SPPs. Perhaps more than any other initiative, expanding participation of these providers in use of DOTS will substantially increase the private sector's share of successful TB treatment in the Philippines.

This report under PhilTIPS develops approaches for private initiatives for an anti-TB program following the world health standard of Directly Observed Treatment Short-course or DOTS. The specific objectives of this program manual are to develop an advocacy program for the Virtual DOTS Model for single private practitioners. The design of the Virtual DOTS Model as recommended by Putnam et.al. is fleshed out in this paper but is renamed here as the SPP-DOTSLink Model. This was done to avoid the misconception that the system is “virtual” and therefore not real.

Objectives

A short-term consultant was hired to flesh out the details of a DOTS network that harnesses these single practice physicians. The specific objectives of this consultancy are:

1. detailed development of the Virtual DOTS design, with strategies and specific plan of implementation, determine personnel needs, the number and timing of site pilot testing, recommend a set of criteria for choosing the number of sites and the sites themselves for pilot testing the model.
2. Scopes of work for the personnel required will be a task of the consultancy. It is crucial that a brief business plan for such an initiative be developed as well as the plans for monitoring and finally the evaluation of the project using standard indicators described in the NTP guidelines and consistent with TIPS PMP.

Specific activities for the consultant are summarized below:

1. Develop a design and an advocacy program involved in the implementation of the virtual DOTS model for single practice private physicians, with suggested performance incentive schemes for physicians and laboratories in the performance of the Virtual DOTS activities
2. Develop an advocacy program and other strategies to enhance the efficiency and chances for sustainability of the initiative
3. Develop a mechanism for coordination of the relationships between private practitioners, pharmacies, Laboratory/microscopy centers, NGOs and TB DOTS centers.
4. Develop a management organogram detailing structures and functions, as well as the relationships within the project management staff and between project staff and community stakeholders.
5. Develop criteria for site selection, planning/phasing and timing of project implementation.
6. Develop scopes of work for personnel required.
7. Develop a monitoring and supervisory scheme, as well as an evaluation plan
8. Develop a cost analysis and creative business plan to achieve sustainability of the initiative.

This report is divided into four major components:

1. a strategy paper describing the situation and the necessary design features of a scalable and sustainable SPP-DOTSLink system
2. a detailed explanation of the SPP-DOTSLink model
3. a financial model of the SPP-DOTSLink system with details on the financial forecasts for the units in the network a project design for the piloting and scaling up of the SPP-DOTSLink model.

Part A
Strategy for Establishing a Single Practice Physician DOTS Model

A-1 Objectives

This section shall discuss the installation of a sustainable DOTS network system among single practice physicians all over the Philippines given the field realities, economic opportunities, and financial limitations of the PhilTIPS project. It starts with key findings from secondary literature followed by analytical framework that lays down the approach towards strategy formulation.

A-2 Overview of Public-Private Mix for DOTS Concept

In 2001 the World Health Organization began exploring private sector involvement in TB Control. In a review of 23 countries across six WHO regions, the findings of the study showed that most NTPs do not have an explicit strategy to involve SPPs in TB Control. Yet, it also revealed a number of locally initiated programs that pioneered the integration of the public and private sectors using DOT program. Following the global assessment, WHO helped to establish and document public-private mix initiatives for DOTS implementation in a variety of country settings. (PPMD-WHO, 2003)

Public-Private Mix DOTS (PPMD) is defined by the DOH as a strategy designed to increase case detection and to synchronize the management of TB cases among TB care providers. It is composed of a series of steps that are orderly undertaken in establishing a functional PPMD unit in the Philippine experience, there are two ways in establishing PPMD units: a) public-initiated PPMD, and b) private-initiated PPMD. The difference is an operational one, whereas in the public-initiated PPMD the operations are centered at public DOTS facility and in the private-initiated PPMD at a private DOTS facility. Both, however, implement NTP-DOTS in consonance with the approved operational policies, standards and technical guidelines. (OPGuide-PPMD-DOH, 2004)

Several PPM-DOTS Centers have already been established in the country. Usually they are attached to existing clinics or hospital institutions. Private medical universities or private corporations organized initial PPM projects. However recent PPM projects show a trend towards more affordable DOTS services. (Romulo Report) In spite of this, the private sector has been slow to adapt DOTS and there is very little formal collaboration between the National Tuberculosis Program and private institutional or individual providers. (PPMD-WHO, 2003)

Despite the rationale and perceived benefits of PPMD, there is a series of issues surrounding the prospect of feasibility and sustainability of the model. It is essential that these issues must be addressed accordingly. The following are the four major issues surrounding the PPMD model:

1. Selection and Recruitment of Private Practitioners (PP)

   It should be a main area of concern at the very outset to determine the process of inclusion for the PPs. Although, PPs with which the NTP already has some contact should be targeted. All types of non-governmental providers should be considered for inclusion in a PPM. The suitability and feasibility of involvement of different types of PPs will depend on the local context.

2. Nature of Incentives

   Ideally, there should be a system of incentives that will be both beneficial and profitable to all modes of stations. There should be clear guidelines on how to create incentives and as to what will be the form of incentives— cash, kind, formal, or informal that will be given. This particular issue is crucial because this may bear an effect on the feasibility of the stations. Incentives could be translated as the mechanism of reward in store for each functional mode of stations. Thus, a careful evaluation of the scope of work and the roles of individual personnel should be clearly defined.

3. Adaptation or Development of Tools

   In line with the planning and development of tools such as referral forms, treatment of card, laboratory form, and supervision visit form, guidelines should be made to ensure that forms are suitable, understandable and acceptable to the target group. Consultations and deliberations will definitely aide in arriving a consensus among the NPT, health units and PPs.

4. Administrative Barriers

   The busy and often disorganized routines of many PPs may be an obstacle for implementation of forms for notification, referrals and transfer. Use of practical tools should be feasible within the existing clinical and administrative environment in private clinics. In order to make the tools easy, they should be designed to:

   a. Minimize the time and resource burden for PPS as well as NTP staff
   b. Minimize the number of forms
   c. Ease logistic and filing procedures

A-3 Demand Analysis

The demand for DOTS may be segmentized by the payment mechanisms. Using this segmentation, out-of-pocket expenditure accounts for the biggest among of spending for health, indicating that the cost of health care in general is paid for from household income. HMOs and PhilHealth are also emerging influentials in the health system, given the growing role they have in paying for the health services of their members. Schools and employers account for a small percentage, but influentials representing the health concerns of students and employees in these institutions will have substantial power in the market given the sheer number of individuals they represent.

LGUs account for a high percentage of health spending, but given that these resources are distributed among over 1,600 autonomous LGUs, it can be challenging to upgrade the municipal health offices to DOTs en masse.

Table 1: Amount of Health Expenditure by Source of Funds (1992-2001)

	AMOUNT (in million pesos)							
SOURCE OF FUNDS	**1997**	**1998**	**1999**	**2000**	**2001**	**Growth Rate (2000-2001)**	**Average Annual Growth Rate[1/]**	PERCENT SHARE
GOVERNMENT	33,347	36,975	41,075 R	46,610	44,715	(4.1)	11.7 [2/]	37.5
National	17,865	19,636	21,725 R	24,404	19,774	(19.0)	7.8 [3/]	16.6
Local	15,482	17,339	19,351	22,206	24,941	12.3	15.6 [4/]	20.9
SOCIAL INSURANCE	4,465	3,574	5,263	8,059	9,259	14.9	16.4	7.8
Medicare	4,241	3,313	4,996	7,800	8,994	15.3	16.6	7.5
Employee's Compensation	224	261	267	258	265	2.6	11.3	0.2
PRIVATE SOURCES	49,267	52,971 R	57,085 R	58,785	65,418	11.3	12.2	54.8
Out-of-Pocket	40,826	43,737 R	45,409 R	46, 536	51,134	9.9	11.2	42.8
Private Insurance	1,689	1,894	2,316	2,305	1,563	(32.2)	3.8	1.3
HMOs	2,174	2,751	4,142 R	4,381	6,838	56.1	33.1	5.7
Employer-Based Plans	3,846	3,775	4,184 R	4,271	4,527	6.0	11.8	3.8
Private Schools	732	814	1,035 R	1,292	1,356	5.0	15.3	1.1
OTHERS*								
ALL SOURCES	87,078	93,521 R	103,424 R	113,454	119,392	5.2	13.0	**100.00**

* - no available data
1/ - Average annual growth rates presented are from 1992 to 2001 except for GOVERNMENT where figures presented are the average annual growth rates during the post devolution years, i.e., from 1995 to 2001 since the government health service provision and financing underwent a transition in the period 1991-1994 as devolution was gradually being implemented
2/ - Average annual growth rate presented is from 1995 to 2001. Average annual growth rate from 1992 to 1994 is 20.8 percent.
3/ - Average annual growth rate presented is from 1995 to 2001. Average annual growth rate from 1992 to 1994 is -2.5 percent
4/ - Average annual growth rate presented is from 1995 to 2001. Average annual growth rate from 1992 to 1994 is 124.7 percent

3.1 Segmentation by Ability and Willingness to Pay

For the success of DOTS therapy, it must become widely accepted by the public. Currently, there are some obstacles to this level of acceptance. A full DOTS regimen provided by a private DOTS Center is estimated to cost Php11,000 per patient. With the average Filipino household of earning an annual income of Php144,039, this amount may pose a problem. The richer households will be able to afford the full treatment course using their health budgets alone, middle-income households can afford this only by dipping into their savings. To lower income families, PhilHealth coverage will help them pay for the full amount. The remainder of the population will have to get partial or full subsidies from government, in addition to PHIC coverage, if any. While some households may be able to pay the full amount from their health budget and households savings, the figures were reduced by 50% (author's estimates) to reflect the number of households who were *willing* to pay. The remaining 50% were reclassified to the category that was willing to receive some subsidies (shown as highlighted figures in Table 3.)

3.2 Segmentation by Employment

Besides household income levels, the type of occupation also give an idea of the paying capacity. In Table 2 below, the two biggest groups are the laborers and unskilled workers followed by farmers, forestry workers, and fishermen, accounting for 50% of the labor force.

Table 2: Employed Persons by Major Occupation Group

October 2002 - October 2003 (in thousands)[1]

Occupation	October 2003	Percentage
Total	31,524	100%
Officials of government and special interest organizations, corporate executives, managers, managing proprietors, and supervisors	3,649	11.6%
Professionals	1,364	4.3%
Technicians and associate professionals	877	2.8%
Clerks	1,320	4.2%
Service workers and shop and market sales workers	2,873	9.1%
Farmers, forestry workers, and fishermen	6,205	19.7%
Trades and related workers	2,898	9.2%
Plant and machine operators and assemblers	2,380	7.5%
Laborers and unskilled workers	9,830	31.2%
Special occupations	125	0.4%

Source: National Statistics Office (NSO), 2003.

About 50% of the total employment population in the Philippines is composed of the informal sector which is about 19 million people contributing an estimated 44% of the Gross Domestic Product of the country.[i] Other studies estimate the size of the informal sector from 60-70% of the total employment population.[ii]

According to the International Labor Organization, the informal sector has been understood to mean very small-scale units producing goods and services, and consisting largely of independent, self-employed producers in urban and rural areas of developing countries like the Philippines, some of which also employ members of the family or workers as part of the labor force operating on little or no capital at all, utilizing low level of technology and skills—thus, operating on low productivity and generating very unstable employment and low income for those who work on it. The sector also includes activities that are carried out without the formal approval from the authorities and escape administrative machinery responsible for enforcing legislation and similar instruments.[iii]

[1] Taken from the National Statistical Coordination Board. 1. Data were taken from the results of the quarterly rounds of the Labor Force Survey (LFS) using past week as reference period. 2. Details may not add up to totals due to rounding.

Table 3: Ability and Willingness to Pay for DOTS based on HH Expenditure for Health and Savings Levels

Ability to Pay	Income Level	Est.No.of TB Patients	Percentage of TB Patients by Able To Pay	Estimated Percentage of TB Patients by Willingness to Pay	(A)Average expenditure for health	(B)Average savings	A+B (Pesos)
	National	277,201	100%	100%	2,714	26,037	28,751
1. Need full government subsidy through global funds and/or PHIC coverage	UnderP10,000	645	32%	32%	216	-1,368	-1,152
	10,000-19,999	5,973			409	-1,733	-1,324
	20,000-29,999	5,188			625	-1,739	-1,114
	30,000-39,999	21,250			841	-2,416	-1,575
	40,000-49,999	25,206			1,047	-546	501
	50,000-59,999	21,714			1,233	1,399	2,632
2. Can pay for some of DOTS expenses	60,000-79,999	36,003	13%	**39%**	1,508	3,764	5,272
3. Can pay for DOTS full course from HH budget for health and HH savings and PHIC coverage	80,000-99,999	27,163	10%	**5%**	1,878	7,928	9,806
4. Can pay for DOTS full course from HH budget for health and HH savings	100,000-149,000	44,133	42%	**21%**	2,485	14,022	16,507
	150,000-249,000	43,246			3,634	33,906	37,540
	250,000-499,000	27,747			5,917	79,977	85,894
5. can pay for DOT full cost from HH budget for health alone	500,000andover	8,933	3%	3%	14,877	292,588	307,465

This definition is inexact and narrow when applied to the Philippine context because it does not encompass the dynamism and importance of the informal sector which is the major provider of urban jobs. It includes a wide range of industries, occupations and working situations from street vendors, small machine shops, small-scale manufacturers such as garments and handicrafts, parlors, transport drivers, etc. [iv] At the same time, it excludes a sizeable portion of the sector involved in IT-based and knowledge-based enterprises that earn high incomes.

Typical characterization of the informal sector vis-à-vis the formal sector is to be as follows:[v]

Table 4: Characteristics of Work in the Formal and Informal Sector

Formal Sector	Informal Sector
Formal working contract	No formal working contract
Regular employment	Irregular employment
Fixed wage	No wage relation, uncertain earnings
Fixed working hours	Uncertain hours
Permanent employment with legal protection	No permanent employment or legal protection

The informal sector cannot therefore be ignored because they account for 50% of the labor force. The informal sector will account for a large market segments in rural areas, and given that a lot of them are have irregular incomes and are not covered by PHIC, only the organized informal sector may have the cash flow to pay for private treatment of DOTS.

3.3 Community Contribution to TB Care

A community-oriented DOTS strategy shows that greater involvement among community members is a key aspect in ensuring the success of TB control management. A review of literature on the perspectives of different regions like Africa, Asia and Latin America demonstrates the importance of any DOTS model to be community-centered (Maher, 1999). A closer examination of the initiated TB projects in these regions reveals that a community-based contribution on the implementation of DOTS strategy highlights the collective effort, spirit of voluntarism and solidarity within the community. Previous studies shows that a community-based DOT is a viable alternative in overcoming the following limitations of public health services:

- Problem of access (distance, travel of time, transportation facility)
- Inadequate health staff and human resource
- Poor economic status of the residents and their ability to meet the direct and indirect costs of treatment from the public facilities
- Inability of the public health functionaries in meeting the socio-psychological needs of the patients.

(WHO; “Community Contribution to TB Care: An Asian Perspective”)

In Bangladesh and India, the initiative to integrate and strengthen the community’s involvement to render certain TB services is largely taken up by some established NGO’s. (WHO; “Community Contribution to TB Care: An Asian Perspective”). There were five projects launched

in Bangladesh and India in collaboration with the following NGO's 1) Bangladesh Rural Advancement Committee (BRAC), 2)Self-Employed Women's Association (SEWA), 3)Health, Education and Economic Development (HEED), 4)Khenjohar and 5)Advocacy for Control of Tuberculosis (ACT).

Generally, the aim of the projects was to demonstrate that decentralizing the provision of TB care beyond health facilities and into the community could contribute to effective NTP performance. The level of participation of the community can be seen through the following activities:

1. The community participates in TB control by identifying TB suspects.
2. Supporting TB patients by directly observing treatment (DOT)
3. Tracing contacts of index cases
4. Providing social support to patients in need
5. Lobbying the local government for placing TB control high in the public health agenda
6. Increasing accountability of local health services to the community

(WHO: "Community Contribution to TB Care: An Asian Perspective")

According to WHO, due to the increasing TB rates in the region of sub-Saharan Africa the need to harness community participation is important. A community-based DOT strategy proves to be an efficient way of complementing the NTP in the region. The district-based projects indicate that providing the option of community DOT can contribute to NTP activities in ways which are effective, affordable and acceptable. The effectiveness of it was shown by the high cure rate in Africa.

3.4 Summary of Relevant Findings on the Demand for DOTS*

1. TB patients accounted for 5-25% of total patients seen per month
2. Usually middle to lower-middle income patients as assessed by SPPs
3. Combination of with and without adequate financial means to cover TB therapy
4. Most clients will need partial or full subsidy for DOTS, especially in rural areas
5. Coverage of up to P4,000 for PhilHealth members
6. Some 50% of the population with PhilHealth
7. Higher income patients may be averse to seeking treatment in public health facilities
8. Middle to lower income patients may be open to receiving subsidized medicinesCommunity dynamics can be used to co-finance and operate DOTS
9. Organized consumer groups may induce the creation of a supply for DOTS, especially if they become champions for DOTS

*(from Putnam, et.al. and other sources)

A-4 Supply Analysis for SPPs

In January 2004, a rapid appraisal was conducted by a team of consultants (Putnam, et.al., 2004) to explore approaches to more effective involvement of private, single-practice physicians in incorporating the DOTS regimen into their routine treatment of TB. A series of focus-group discussions also provided insights into the possible roles of various stakeholders in a DOTS network. In the Philippines, a high percentage of people, even those of modest means, seek

health care from private practitioners. The following is a summary of the profile of single-practice physicians:

1. Estimated to 12,000-15,000 single practice physicians
2. Typically trained as general practitioners or family physicians
3. Some have hospital based practices
4. An estimated 20% dispensing some medicines in their clinics
5. few with in-house lab
6. all with access to microscopy and x-ray facilities
7. have approximately 3 TB patients per month or higher
8. may be segmented by openness to adopting DOTS as:
    - ♦ potential champions for DOTS
    - ♦ potential early adopters for DOTS
    - ♦ fence-sitters watching for early successes before adopting DOTS
    - ♦ unrecruitable
9. SPPs may be uninterested in the administrative processes involved in DOTS

A-5 Analytical Framework

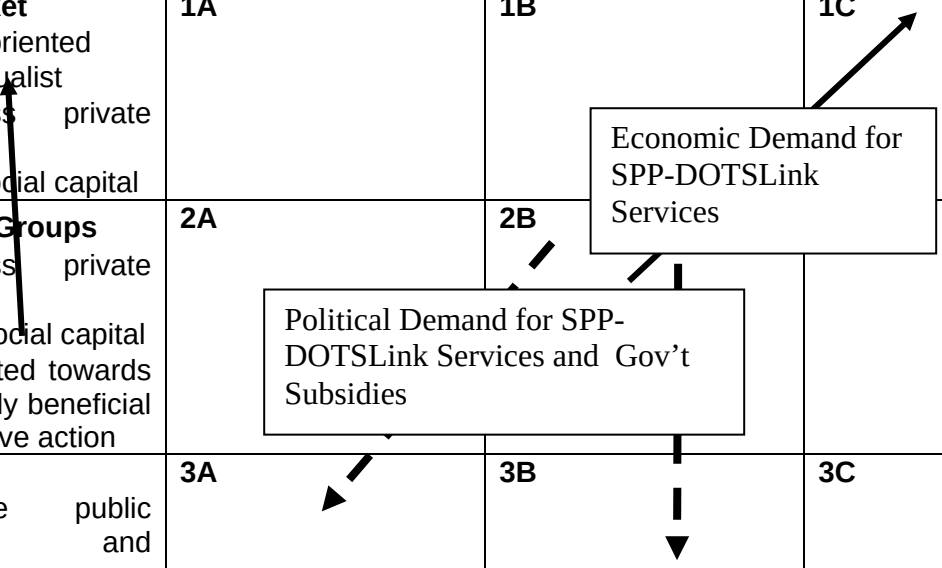
In this paper, the Philippine population shall be categorized according to three economies, namely the welfare economy, informal economy, and formal economy roughly corresponding to the income levels of the households and the type of employment that individuals belong to. Particular attention is devoted to the informal economy as it accounts for some 50% of the Philippine labor force and lies in the gray area between being on welfare and being able to fully pay for private health services (see Table 5).

Enterprises and organizations shall also be classified into any of three categories based on the politico-economic logic of their organizations. In the first category are the for-profit organizations, where capital is mobilized as a factor of production in order to gain profit in the free market. In the second category are self-help groups which collectively address their needs by consolidating their social, economic, and political capital. This category shall include cooperatives, labor unions, people's organizations and other grassroots organizations.
Company HR departments and shall also be considered to behave from this logic when they pursue the health needs of their employees. Lastly are state organizations that aim to provide public goods and services to the general public, in addition to providing welfare to the poor.

This framework, in effect, maps out the logic and motivations of the different organizations, allowing DOTS implementors to position DOTS correctly and craft incentives appropriate to the organizations. The categories are not clear-cut, and actually represent a continuum along the two axes.

Table 5: Politico-economic Profile of Actors in Society

	Welfare economy ♦ Some with PHIC coverage as indigents ♦ Target of gov't subsidies ♦ Very Limited ability to pay	**Informal economy** ♦ Usu.no PhilHealth ♦ Irregular salary ♦ Some ability to pay	**Formal economy** ♦ With PhilHealth ♦ Regular salary ♦ Able to pay
Free market ♦ Profit oriented ♦ Individualist ♦ Address private needs ♦ Low social capital	**1A**	**1B**	**1C**
Self-help Groups ♦ Address private needs ♦ High social capital ♦ Motivated towards mutually beneficial collective action	**2A**	**2B**	
State ♦ Provide public goods and services ♦ Provide welfare	**3A**	**3B**	**3C**



A-6 Strategy Formulation

Given the preceding discussions, the various potential actors in a DOTS Network are profiled according to the politico-economic model or business model that guides the operations of their organizations, along with the primary and secondary gains that they may enjoy from participation in a DOTS network.

Table 6: Profile of Potential Actors in DOTS Network

Stakeholder	Politico-economic Model/ Business Model	Primary gains from SPP-DOTSLink	Secondary Gains from SPP-DOTSLink
Supply Side			
1. Physician	Deliver services to earn a profit	Revenues from providing DOTS services	Able to cross-sell other services
2. Pharmacy	Sell medicines to earn a profit	Revenues from providing DOTS services	Able to cross-sell other services
3. Diagnostic lab	Deliver services to earn a profit	Revenues from providing DOTS services	Able to cross-sell other services
4. LGU	Provide public health services;	Disease control; revenues from PhilHealth	Political mileage
5. Government health facility	Provide public health services	Disease control; revenues from PhilHealth	Community relations
Demand Side			
6. PhilHealth	Sustainable universal health insurance	Increased demand for PHIC coverage;	Increased criticality of PHIC in public health
7. Employer	Produce goods or services to earn a profit	Reduced absenteeism, increased productivity	Improved employer-employee relationship; community relations
8. Self-help group	Address needs of members	Increased commitment of members	Increased social capital; increased role within the community
9. Patient	Access services	Treatment of TB	Reduced transmission to household; reduced income losses

A-7 The SPP-DOTSLink Strategy and Network Design Features

Given the preceding discussions, an effective, scalable DOTS Network can be established by first developing a network of SPPs where there is effective demand and a SPP who will champion the project. Effective demand for DOTS will likely be in the form of: a) a community with a high proportion of high income households, and; 2) a community with a high proportion of low to middle income households who can be mobilized for collective consumer action.

In later phases, PHIC institutionalized SPP-DOTSLink by making it a standard requirement from SPPs who with to get reimbursements from PHIC for TB treatment.

The SPP-DOTSLink network operates on several dimensions, discussed below as network "layers". A detailed discussion of the network layers will be made in the manuals of procedures and other documents.

Table 7: Features of Different Network Layers in SPP-DOTSLink

Design Feature	Assumptions and Logic	Strategy
Business Layer		
Market-driven	SPP in the private sector have entrepreneurial business models and are expected to be responsive to consumer demands.	Start by linking interested SPPs with organized groups representing a captive clientele for the SPPS. This shall allow the different business units within SPP-DOTSLink to achieve economies of scale sooner. Each station within SPP-DOTSLink shall be a viable business unit with as little external subsidy as possible.
Leveraged Social Capital	Social capital is a resource that can be used and increased when mobilized through mutually beneficial collective actions such as TB treatment.	Harness bonding and bridging social capital to reduce transaction costs by tapping organized consumer side organizations in the area as partners.
Strong Network Branding	DOTS is of real value to the patients and other stakeholders. Brands help customers develop a relationship and loyalty to the set of values that SPP-DOTSLink provides.	Develop a brand to distinguish SPP-DOTSLink accredited service providers from non-accredited providers to stakeholders recognize and respond to the unique value-added features of the SPP-DOTSLink.
PHIC-compatible (and PHIC-driven in later stages)	PHIC has influence over SPPs by way of accreditation and reimbursements.	In the long run, PHIC may be the made a co-enforcer of the SPP-DOTSLink system by ensuring that SPP-DOTSLink services are compensated for by PHIC.
Organizational Layer		
Two-tier Network Administration	Most of the administration work will be done on a local level. A central network administrator will be needed to provide overall technical leadership.	Network administration will be done primarily through a Local network administrator who will help start up the network and monitor it on a regular basis to ensure compliance with protocols and standards. A Central Network Administrator shall oversee the entire network from a national level through a centralized information system, develop upgrades of protocols and standards, and manage alliances with partner national agencies and institutions.
Mobilization of Local Organizations	Social capital, knowledge capital, and market demand can be leveraged through local organizations.	Local institutions shall be harnessed to fill as many of the DOTS roles as possible. The SPP-DOTSLink Local network administrator shall fill system gaps only on a temporary basis, during the early implementation stages.

Design Feature	Assumptions and Logic	Strategy
Redundant Stations	Consumers will be better off having a range of choices as far as service providers are concerned, allowing them to tap into the SPP-DOTSLink while minimizing transaction costs and transportation costs	Establish at least two stations per SPP-DOTSLink cluster to enhance competition and give consumers a choice.
Scalable	Given that there are an estimated 14,000 Single Practitioners, the system is designed so that it can conveniently reach all interested SPPs. ♦ Modularized ♦ Self-replicating ♦ Self-updating	SPP-DOTSLink systems shall be composed primarily of standards and protocols that the affiliates shall implement as they relate to the patient and with other affiliates. Over time, these protocols and standards shall be accessible via web and e-learning materials, allowing single practitioners to affiliate with SPP-DOTSLink by complying with the standards and protocols, and administering self-evaluation tools before the SPP-DOTSLink validates and accredits them.
Patient-friendly	The patient will have to be able to transact with the SPP-DOTSLink stations seamlessly.	A Unified Patient Interface shall be developed. A robust referral protocol among the SPP-DOTSLink Stations, and good reference materials for the patients shall allow patients to move through SPP-DOTSLink seamlessly.
Information Layer		
Standards- and Protocol-driven	SPP-DOTSLink stations will have to comply with DOTS standards, and refer to other stations seamlessly so that the DOTS system is implemented.	Service providers will have to comply with standards and protocols in order to become affiliates of SPP-DOTSLink.
Web-enabled, e-learning enabled	The system shall utilize the web and mobile technologies for MIS and e-learning in order to reduce marginal cost of scaling up.	After the pilot stage, most of the updating and upgrading of the system will be done using web and e-learning technologies, so that scaling up and upgrading will require less funds.

The implementation of the SPP model will be demonstrated in selected pilot sites where SPPs will be linked with other standalone stations or with existing DOTS Centers or DOTS models in Phase 1 (Pls see Table 2.8.2 below). SPP-DOTSLink will be the network structure upon which the SPP model will run. In Phase 2, SPP-DOTSLink will expand to cover more SPPs over a wider geographic area, eventually converging with other DOTS models that have been piloted. Table Y below describes the convergence of SPP-DOTSLink with other initiatives of PhilTips.

Table 8: Stages in the Implementation of SPP-DOTSLink

Phase	**Phase 1 Piloting of SPP Model through a Local SPP-DOTSLink Cluster**			**Phase 2 Mainstreaming of DOTSLink among all DOTS Stakeholders and DOTS Models Nationwide**	
	1-A	**1-B**	**1-C**	**2-A**	**2-B**
PHIC	Supports DOTS Center	Supports SPP-DOTSLink Pilot	Supports SPP-DOTSLink Pilot	Mandates SPP-DOTSLink affiliation among accredited MDs	
LGUs	Unaware	Direct advocacy	Option to mandate DOTS in LGU	Option to mandate DOTS in LGU	
Consumer-side organizations	Unaware	Direct advocacy	Demand dots	National organizations demand DOTS compliance nationwide	
Patients	Unaware	Advocacy through their organizations	Demand dots		
Diagnostics	Unaware	Unaware	Demand-induced DOTS compliance		
Pharmacy	Unaware	Unaware	Demand-induced DOTS compliance		
MDs	Unaware	Unaware	Demand-induced or champion-led DOTS compliance		
PHIC				Mandates DOTS as CPG and DOTSLink affiliation among accredited SPP MDs	Upgrades standards of DOTSLink affiliates regularly
LGUs				Option to mandate DOTS as	Option to mandate DOTS in LGU

Phase	**Phase 1 Piloting of SPP Model through a Local SPP-DOTSLink Cluster**			**Phase 2 Mainstreaming of DOTSLink among all DOTS Stakeholders and DOTS Models Nationwide**	
	1-A	**1-B**	**1-C**	**2-A**	**2-B**
				CPG in LGU	
Consumer-side organizations				National organizations demand DOTS compliance nationwide	Champions of DOTS
Patients				Unaware of DOTSLink unless on treatment	Unaware of DOTSLink unless on treatment
Diagnostics				PHIC-Induced DOTS Compliance	DOTS de facto standard
Pharmacy				PHIC-Induced DOTS Compliance	DOTS de facto standard
MDs				PHIC-Induced DOTS Compliance	DOTS de facto standard

Table 9: Mainstreaming and Convergence of SPP-DOTSLink with other PhilTips Initiatives

Strategic Goals and Tasks of PhilTIPS	How PhilTIPS Task Strengthens SPP-DOTSLink	How DOTSLink Synergizes with PhilTIPS Tasks
Task 1: Enabling Environment ► Institutionalization of comprehensive policies, guidelines, and regulations at the national and local levels that promote appropriate, complementary implementation of DOTS treatment by public and private providers.	• Design a mechanism to ensure private sector access to quality and affordable TB drugs • Establishing quality assurance covenants among private providers of DOTS that commits them to practice DOTS • Establishing covenants with employers and government department orders that promote TB patients rights • Implementing a policy advocacy strategy and organization of a Private Sector TB Summit	• Allows for maximum private sector participation in the areas of clinical out-patient care, diagnosis, testing, drug supply and treatment. • Advocates more effective involvement of the private sector as a partner of government in curing and preventing TB. • DOTSLink is an alliance of service providers against TB and a network of stations linked harmoniously that adheres to the global DOTS standards.
Task 2: Operations Research ► Identification of best strategies through operations research to improve and expand DOTS implementation in the private sector.	• Form a team of consultants to explore approaches to more effective involvement of private, SPP in incorporating the DOTS regimen into their routine treatment of TB. • Design, test through advance implementation, assess and prepare replication guidelines for four new DOTS models, namely: pharmacy initiatives, 2 variants of single-practice network including a social franchising set-up, and informal workforce.	• DOTSLink is standards-and-protocol driven. DOTSLink affiliates will have to comply with standards and protocols and have to undergo proper accreditation and certification. • DOTSLink network adheres to proper evaluation and monitoring standards in line with the NTP guidelines.
Task 3: Develop/Create DOTS Models ► Enhancement of private sector DOTS models in specific areas and demonstration of their potential replication.	• Complete a situation analysis, enhancement, assessment and replication guidelines for the existing DOTS models, namely: hospital-based, multi-specialty clinic-based; HMO-based and local coalition. • To disseminate the DOTS model implementation guidelines, which should capture the learnings from the developmental phase, and be able to replicate/ expand DOTS program in at least 25 sites.	• Aims to conduct site pilot testing that will best serve as a ground for future replication. • Performs feasibility and stakeholder's analysis to examine the prospect of sustainability of the project.
Task 4: Replication of DOTS ► Replication of best TB DOTS approaches and service models in a number of strategic cities and large municipalities nationwide;	• Maximize the impact of several initiatives in some sites by co-locating pharmacy, certification-related activities and possibly workplace initiatives in some sites. • Enhance clinic-based DOTS models by studying the experiences of various existing DOTS programs in the private sector. Best practices will be incorporated into a DOTS replication program for application in 22 to 25 sites nationwide.	• Aims to expand the DOTSLink network in different urban and provincial centers around the country.

Strategic Goals and Tasks of PhilTIPS	How PhilTIPS Task Strengthens SPP-DOTSLink	How DOTSLink Synergizes with PhilTIPS Tasks
Task 5: Training ► Integration of TB DOTS in the curriculum of medical schools and professional training courses, and implementation of behavior-change campaigns to influence the TB treatment practice of private health providers **Task 5b: Certification** ***Task 5c: Communication***	• Provide both pre and in-service training on various aspects of DOTS service provision for private health providers involved in TB treatment. • Enjoin more medical schools to integrate the DOTS syllabus into their curricula and will provide mentoring and technical assistance in the implementation of Master TB Educator Award (MTBEA) • Assist professional societies conduct training on DOTS • Evaluate and improve the DOTS certification system • Assist in developing capacity of regional certifiers by conducting a training of regional certifiers • Complete the Integrated Communication Strategy • Provide communication support to all projects tasks	• In a DOTSLink network, each participating affiliate shall receive training in the technical aspects of DOTS and they will also receive patient management training skills. • Community-wide anti-TB educational awareness campaign and promotional events will be initiated.
Task 6: Financing ► Development of appropriate guidelines and regulations to promote quality DOTS service and financing programs among private health groups.	• Promote health care financing schemes that strengthen private sector delivery of TB control and cure service developed and implemented. • Complete financial analysis of existing DOTS models • Assist DOTS replicators prepare business and financial plan • Provide TA to PhilHealth to improve TB benefit package	• Coordinate with PhilHealth and other NGO or civic organizations to sponsor health • Develop a brand to distinguish DOTSLink accredited service providers from non-accredited providers to stakeholders recognize and respond to unique value-added features of the DOTSLink.

Sources: (1) Work Plan for Year Two of PhilTIPS Project: 01 Oct. 2003 to 31 Dec. 2004
(2) NTP Manual of Procedures: 2001.

Part B.

The Single Practice Physician Model Through SPP-DOTS*Link*

B-1 Overview

The SPP-DOTSLink model is a variation from the PPMD model. Under SPP-DOTSLink, the various components of a DOTS Center are decentralized into a network of four individual but interdependent components coordinated by a Network Administrator. The four components are: the single private practitioners (SPP), the microscopy laboratory, the pharmacy, and the treatment coordinator. Decentralization is a necessary step in the aim to make DOTS a more acceptable practice for the private sector through collaboration with already existing facilities instead of having to create new centers.

The SPP-DOTSLink model is not just a model for delivering health services. It also integrates an advocacy program that aims to involve the community in forming their own SPP-DOTSLink alliances with health service providers, local governments, and community organizations. Hopefully, each SPP-DOTSLink network replicates itself to other communities by being self-sustainable and attractive for patients and health service providers alike.

The objective of the establishment of a SPP-DOTSLink is to ensure that patients of all SPPs in a particular community are correctly diagnosed and treated through DOTS, while remaining under the care of their private doctor. Secondarily, it aims to provide patients with an alternative source of DOTS service, even if they might otherwise be willing to be referred to a Health Center or private available, the greater the prospects for compliance and, ultimately, reduction in the TB prevalence.

B-2 Design Features of the SPP-DOTSLink Model

2.1. Stations

The key front-end physical components of the SPP-DOTSLink are referred to as affiliated stations that receive TB patients and refer them to the next SPP-DOTSLink affiliated station for a seamlessly integrated experience from the patient's perspective.

2.1.1. Single Private Practitioner

The single private practitioner (SPP) is the first station and entry portal for the SPP-DOTSLink Network. They are general practitioners and specialists with small private clinics capable of providing personal care and attention to their patients. They act as the primary point person where preliminary diagnosis and consultation with the patient is performed.

The private practitioner acts as the guide of the patient through the Network. He or she will see the patient through the entire process without having to physically be there for the patient at every step. This is assured by the coordination protocol of the Network through the Network Administrator. The link of communication with the SPP and the Network Administrator must be secured through a continuous flow of reporting and consultation among them. The SPP then will have to submit the list of registered patients together with an evaluation of their medical status

and the monitoring scheme update of the patients. Through greater collaboration and effective communication with other station, they will establish a trusting and lasting relationship with other stations.

2.1.2. Microscopy Laboratory

The microscopy laboratory is the testing station for all sputum-smear tests. It consists of a well-equipped facility staffed by accredited microscopists and other staff who are also capable of providing personal attention to the patients. Under this station, a series of technical procedures takes place. The flow of conduct is determined primarily between the medical expertise of the attending MT of the microscopy staff and through proper coordination with the SPP.

The attending medical technologist or nurse will give a short briefing of what the sputum-smear test is about after the SPPs referral for possible testing. They will provide the patient with the necessary information on how the examination is conducted and aid the patient with proper instruction. The test will be conducted first, by giving the patient a sterilized vial that he or she will have to take home. The patient must now collect his or her own sputum called the early morning specimen, which is the first sputum expelled in the morning. The nurse collects the third spot specimen when the patient returns to the microscopy laboratory to give his or her second specimen. This entire process shall take no longer than two days. The MT will record the results in the NTP Laboratory Registry. The patient will have to return to the SPP after the microscopy laboratory holds the result.

2.1.3. Pharmacy

The core function of the pharmacy is to facilitate the medication and curing process of the patient in strict coordination with the referral of the attending SPP and the examination results produced by the microscopy laboratory. The pharmacy as a network station underscores a strong *Link* and coordination with the government assistance and health units. The SPP-DOTSLink network allows the inclusion of pharmacies to serve as a distribution network for the anti-TB drugs. Whether they will earn a profit from this participation is a matter of further discussion.

Patients found positive have two options of obtaining the medicines. The first option is that the patient may choose to pay directly for the corresponding cost for the drugs. While the second option is open for those who may choose to avail free medicines, taking into consideration that the TB disease is prevalent among the poor and low-income earners. For those who would like to avail free medicine they must register at the Health Center using his or her NTP ID Card and submit himself or herself to evaluation by the proper official. If he or she qualifies for subsidized or free anti-TB drugs, he or she is then referred to a distribution outlet to collect the drugs. A provision has been mandated by the DOH in reference for those indigent patients who have been diagnosed with TB. The provision of Anti-TB drugs shall be done according to a stratified socialized scheme. The cost of the drugs shall either be free, partially subsidized or not depending on the patient's ability to pay. The government must also keep an ample stock of the drugs to guarantee its availability to the patients. All patients who are members of PhilHealth can now avail of a 4,000 peso benefit package to defray the cost of the DOTS regimen under the PhilHealth Outpatient Anti-TB DOTS Benefit Package.

2.1.4 Treatment Coordinator

The treatment coordinator is the one primarily in-charge of designating and securing that the diagnosed patient with TB to have a suitable treatment partner. The treatment coordinator in a SPP-DOTSLink network is tasked to perform and oversee that certain standards and guidelines in determining the process of choosing a treatment partner is accordingly coordinated. Part of the work of a treatment coordinator is to help in establishing significant connections with other NGO or local civic organization within the community area so as to secure a pool of future treatment partners. This may be achieved through continuous consultations and communication with the Network Administrator. They could also assist in giving trainings and workshops for the participating treatment partners.

2.2. Coordination & Administration

Each station shall be coordinated and administered by a local Network Administrator. The entire network shall also be monitored periodically by the National Tuberculosis Control Coordinating Council (NTPCC) through the SPP-DOTSLink Central office.

The basic functions of the administrator are:

- To assess an areas capability for a SPP-DOTSLink Network
- To establish and promote SPP-DOTSLink in a selected area
- To maintain the program through regular monitoring and technical inputs
- To evaluate and supervise the program

2.3. Protocol

A protocol of procedures will ensure that all component stations know their roles and responsibilities within the network. Following a protocol will also be highly beneficial to the patient who may tend to become confused if he or she does not fully understand the steps involved in receiving DOT treatment. The local network administrator shall be responsible for compliance by the affiliates to the protocol.

Table 10 Draft Protocol Procedures Involved in Receiving DOT Treatment
(Adapted from DOH DOTS Manual)

Station	Condition	Action	Person Responsible
Private Physician	If patient experiences coughing with blood, fatigue, fever, and other TB Symptoms	Then refer to microscopy laboratory for sputum smear test.	Private Physician
		Fill out laboratory request form and give to patient	Private Physician
Microscopy Laboratory	If patient is referred for testing	Referred patient is processed and assigned a test serial number.	Medical technologist or Nurse
		Give orientation regarding sputum smear testing and TB	

Station	Condition	Action	Person Responsible
		Perform sputum smear testing according to NTP guidelines	
		Record results in Laboratory request form and report results to physician	
Private Physician	If patient sputum test is negative but with TB symptoms	Refer to diagnostic committee for second opinion or conduct chest x-ray if necessary	Private Physician
	If patient sputum test is positive and is confirmed to have TB	Orient patient on DOT program.	
		Give patient NTP ID Card and Treatment Cards	
		Coordinate with the Treatment Partners coordinator of TB patient's need for treatment partner.	
		Sends basic patient information to Treatment Coordinator for partner-patient matching	
Private Physician		Records the patient's name in TB register	
Treatment Coordinator	If the information that lists down the patient's age, address, and other necessary information for proper treatment partner matching has been received	TC reviews database of trained volunteer treatment partners and selects those who live in close proximity to the patient.	Treatment Coordinator
	If treatment partner is a member of the patient's family or a friend	The treatment partner must undergo proper orientation and training with the treatment coordinator (or doctor, midwife, nurse).	Treatment Coordinator/ Trainor
	If the TB patient chooses an external Treatment Partner	The TC chooses the partner, contacts him or her and sets a meeting appointment with the patient and the partner	Treatment Coordinator
		Patient and treatment partner meet for the first time either under the supervision of the TC or the	Patient/ Treatment Coordinator

Station	Condition	Action	Person Responsible
		patient's doctor to sign a contract of treatment which will stipulate the terms of the arrangement.	
		The second NTP ID Card is given to the treatment partner.	Treatment Coordinator
Pharmacy	If the patient wishes to avail of free medicine	He/she must register at the Health Center using his or her NTP ID Card and submit himself or herself to evaluation by the proper official.	Public Health Official
	If he or she qualifies for subsidized or free anti-TB drugs	He/she is then referred to a distribution outlet (health center or pharmacy) to collect the drugs.	Public Health Official
		The patient will be given the appropriate packs according to the treatment dosage his or her doctor recommends.	Pharmacist
		The patient pays for the drugs or presents his waiver for free drugs.	Patient
Treatment Partners	The TB patient starts his/her treatment	Patient reports to his or her treatment partner daily.	
		After intake of the drugs, the treatment partner checks and signs the treatment partner's NTP ID Card as well as the patient's NTP ID Card.	Patient/ Treatment Partners
		The Treatment Partner shall regularly motivate the patient to continue treatment.	
		After the first 2 months, the patient and the Treatment Partner should consult with the physician	
		After six months the patient and the Treatment partner may consult with the doctor only when needed.	
Private Physician	If the DOT regimen is complete	Patient visits his/her doctor for a repeat check-up.	Patient

Station	Condition	Action	Person Responsible
		The Doctor analyzes on the progress of the patient and includes this in his or her quarterly reports to the SPP-DOTSLink NA.	Private Physician/ Network Administrator
	If the doctor verifies the patients compliance	The patient must present the NTP ID Cards to the doctor to prove his or her compliance with DOTS.	Patient
		Reports to the treatment coordinator of the compliance of the treatment partner.	Private Physician
		Doctor refers patient again to the microscopy laboratory for a follow-up sputum-smear test.	
Microscopy Laboratory	If referred to microscopy center for a follow-up Sputum-smear test.	Medical Technologists collects three samples of sputum and tests whether the intake of drugs has successfully cured the patient's TB. (see process above)	Medical technologist or Nurse
		Medical Technologists sends the laboratory analysis back to the Doctor.	
Private Physician	If follow-up smear tests indicate that the patient has no active TB	The patient is advised by the doctor of the treatment's success.	Private Physician
	If the patient is still smear-positive or his/her case is doubtful	The doctor either advises a new regimen or labels the case as "Treatment Failure	
	If the patient is labeled as Treatment Failure	The doctor may refer the patient to the hospital/ DOTS Center or the Diagnostic Committee for further recommendations.	
		Doctor sends quarterly report form to NA	
Microscopy Laboratory	Reporting and Monitoring	Microscopy Laboratory sends Laboratory register to NA.	Medical technologist
Pharmacy		Pharmacy or Health center sends status of supply report to NA	Pharmacist

Station	Condition	Action	Person Responsible
Network Administrator		Network Administrator prepares quarterly report for SPP-DOTSLink Central	Network Administrator
	Evaluation of SPP-DOTSLink	NTP Center and Regional TB Coordinating Council evaluates SPP-DOTSLink and recommends changes to improve the network	Regional TB Coordinating Council NTP Center
		Statistics on TB are compiled	SPP-DOTSLink Central

B-3 Standards

Each component of the network shall strictly adhere to the set guidelines and standard operating procedures of the National Tuberculosis Program as outlined in its manuals. This covers the range of activities from first diagnosis up to the end of the DOT therapy program. Furthermore, the standard forms found in the NTP manual shall also be the same forms used in SPP-DOTSLink Networks with the minor addition of a “road map” to guide patients as they progress from station to station. It is important that the monitoring and supervisory functions of the NTP through SPP-DOTSLink Central remain effective and free of any obstacles such as an entirely new system of reporting and monitoring.

A series of training seminars will be conducted to ensure that the information contained in the procedural manuals is disseminated to all concerned providers. The local SPP-DOTSLink Network Administrator in coordination with SPP-DOTSLink Central will organize these seminars. The ideal date for conducting the seminars is around a month before the launch of SPP-DOTSLink. This allows enough time for the Network affiliates to secure the proper accreditation and certification needed to become SPP-DOTSLink stations.

The technical input for these seminars shall come from the DOH in cooperation with PhilCAT and PhilTIPS. PhilHealth shall also be involved in the training and accreditation of private physicians.

B-4 Accreditation and certification

After completing the necessary training requirements, service providers will then apply for accreditation as SPP-DOTSLink affiliates and certification of their capability to treat TB patients through DOTS. For microscopy laboratories and pharmacies, PhilCAT shall be the agency responsible for granting certificates and assessing the providers’ adherence to NTP standards. For private physicians and other stations, PhilHealth shall be the granting agency for accreditation according to its standards pursuant to PhilHealth circular no. 17, s-2003. Treatment coordinators shall also be trained by the proper health authorities. They will in turn be tasked to recruit and train treatment partners who may either be health care workers or volunteers.

The benefits of accreditation and certification as SPP-DOTSLink affiliates are two-fold: affiliates will be able to provide quality health care that is up to standard and through the recognition of their quality service under the SPP-DOTSLink seal, the affiliates' credibility within the community increases; in time producing other intangible benefits.

B-5 Affiliate Incentives

What forms of benefit and incentives could the service components get in the SPP-DOTSLink network? A balance between the different interests of the service components must be maintained so as to motivate a continuous delivery of services among them.

Below is an incentive scheme designed to meet the varying interest of the health providers. The secondary gains of the stakeholders under Table 6 above will also serve as secondary non-cash incentives for the affiliates.

Table 11 Incentive Schemes for Health Providers

Incentives	SPP	Lab	Pharm	TP
PhilHealth accreditation	X			
PhilHealth compensation (up to Php 4,000 per patient)	X	X	X	?
Possible financial assistance through TB Project grant funds	X	X	X	
Exclusive referral system under SPP-DOTSLink	X	X	X	X
Better patients' records maintenance and tracking system	X	X		
Increased number of patients due to patient preference for SPP-DOTSLink and DOH accredited providers over non-accredited providers.	X	X	X	
Community recognition and support	X	X	X	X
PhilCAT Training		X	X	X
PhilCAT Certification		X	X	X
Honorarium for services rendered				X
Payment for services rendered	X	X	X	
Guarantee of future Treatment Partner				X
Access to up to date information regarding TB	X	X	X	X
Assistance and support to establish stations	X	X	X	X

B-6 The Local Network Administrator (NA)

The Local Network Administrator acts as the coordinating body among service stations. The NA may be composed of one person or a group of persons, such as NGO or a group of community workers (SPP Manual, 2004). The Local Network administrator plays a crucial role in establishing a consolidated network of service stations and securing a strong collaborative system of communication among service stations.

6.1. Responsibilities

Generally, the scope of work and responsibilities of a Local Network administrator is to facilitate the establishment of a SPP-DOTSLink in their area. The NA functions as a central body that will initially create the virtual infrastructure for each service station then maintain and continuously upgrade it. The extent of their work ranges from the early planning phase up to the fully functional phase.

The NA acts in dual capacity as a moderator and a regulator. Their primary role is to ensure that the patient treatment process runs smoothly at with the least possible inconveniences to the patients. Next, the NA is expected to enforce certain standards or protocols in order to maintain the quality of the network. In general, the NA ensures that the operation of the SPP-DOTSLink is correctly, effectively and efficiently carried out following the NTP policies, standards and procedures.

Below is a summary of the NA's major tasks (NTP Manual of Procedures, 2001):

- Coordinate regularly with the physicians,
- Must recruit treatment partners,
- Check that the laboratories maintain their certification standards
- Prepare reports for SPP-DOTSLink Central, and
- Match treatment partners with patients through the establishment of the Treatment Coordinator

6.2. Sourcing of Potential NAs from the Community

There is a wide range of possible sources of recruiting a potential NA. He or she may be a volunteer SPP or from the community-based agency involved in NGOs or local civic organizations. He may be a retired member of the medical association such as a member of the Rotary Club or a volunteer from a sponsoring commercial firm (SPP Manual, Feb.12'04). In any case, it is the individual's willingness and commitment to be involved in such projects that is important.

6.3 Alliance Building

The need to achieve a seamless connection between service stations that would strongly facilitate the feasibility and sustainability of the SPP-DOTSLink network is largely determined by the terms of its alliance mechanism and protocol system. The structure of the alliance within the SPP-DOTSLink network is arranged in such a way that each network affiliate has a specific role to fulfill and does so because the affiliates understand their importance as interdependent stations to carry out the treatment program. It is the local network administrator who gathers willing providers, orients them about DOTS and the SPP-DOTSLink model, and then facilitates the establishment of the actual network.

6.4. Specific Tasks

The initial step should be to establish a link between the government through its health units and the private sector, if such a link did not previously exist. Once, there is initiative coming from either the public or private sector, the next step is to organize a meeting for community consultation and assessment. This is in keeping with the idea of establishing a community-based SPP-DOTSLink network by working on the health needs of the community. All this can be done in a DOTS road show that will showcase the program and the need as well for organizing a network of providers. Logically, this road show shall attract interested providers to the SPP-DOTSLink model. From there, further consultations, meetings and trainings are needed before the local Network Administrator can actually prepare for its formal launch.

It must be noted that, the major components of DOTS, even with a great deal of private initiative involve, the SPP-DOTSLink will be enhanced by explicit political support from the national and local governments. However, this may leave the program vulnerable in times of political instability. The program thus should be insulated from external pressure due to political meddling.

6.5. Quality Control

There are two major levels in quality maintenance and evaluation of the SPP-DOTSLink network. First, is in the administrative level: it consists of the processes of evaluation through proper reporting and supervision. NTP documents such as the TB treatment card, laboratory registry form, and NTP register shall be adapted and made part of standard operating procedure. The operation of this can be done in strict coordination with the SPPs, the microscopy laboratory, the pharmacy and the treatment coordinator. However, to ensure its relevance and practical use by the affiliates and their patients, the medical forms can be modified or adapted appropriately. (SPP Manual, Feb.12’04).

The second level is the station-specific level. The groundwork for the success of the SPP-DOTSLink network is in the quality of ties that bind all the component stations. For this reason, it is necessary that the stream of connections that moves from each station to other service stations is well-coordinated. Thus, the task of ensuring that all the network service stations are running smoothly is a crucial function of the Local Network Administrator. Ensuring that the roles and responsibilities of the component stations are clearly defined could do this. In addition to that, the SPPs shall prepare quarterly reports on the treatment outcomes of TB cases while the laboratory microscopy must prepare reports on NTP Laboratory activities. This will serve as a

form of a feedback mechanism of the operations which will enable the NA to analyze and study the effectiveness of the network in order to improve and adjust the system accordingly.

B-7 Public Sector Involvement

Even with the decentralization, and in effect devolution, of DOTS Centers to an almost entirely private initiative network, the public sector shall continue to function in its capacity as supervisor and authority of the NTP.

7.1. NTP

The National Tuberculosis Program framework shall remain the overarching framework for the establishment of SPP-DOTSLink Network. To ensure that NTP goals and standards are met, the DOH will coordinate with SPP-DOTSLink Central through the DOTSLink Board of Advisers (BOA). SPP-DOTSLink BOA members shall be composed of a mix of public and private stakeholders, incorporating technical assistance from PhilCAT and PhilTIPS. It shall be composed of a Central Network Administration staff whose job it will be to organize and set-up SPP-DOTSLink Local Network Administrators in each area.

Existing protocols and standards of the NTP shall be fully followed by the SPP-DOTSLink Protocol with minor changes as to the roles of each station. Otherwise, SPP-DOTSLink shall also use the standard NTP processes, forms and IDs.

7.2. PhilHealth and PhilCAT

PhilHealth and PhilCAT are respectively tasked with accrediting and certifying the different SPP-DOTSLink providers. PhilHealth shall accredit the physicians and pharmacies, while PhilCAT will assist in the training and certification of Microscopy laboratories and Treatment Partners They will ensure that the providers meet the standards and practices of DOTS treatment in accordance with the NTP guidelines on DOTS Treatment.

PhilHealth will also provide benefit packages for PhilHealth members pursuant to PhilHealth circular no. 17 and 19 s. 2003.

7.3. Local Government Unit

In line with the devolution of public health services to the local governments, it is therefore expected that the local governments in pilot areas shall actively support the set-up and operation of the SPP-DOTSLink Network. It can do so by becoming a member of the SPP-DOTSLink Network Alliance and assist by taking on the role of Treatment Coordinator. LGUs can also provide much needed financial support to the Network whether directly, as in operational funds, or indirectly through government subsidy of anti-TB medicines. The DOT short course is not just a method of treating TB because one of its 5 main components explicitly cites the need for government support of the anti-TB campaign.

B-8 Community Participation

The SPP-DOTSLink network aims to actively engage the community. It expands the opportunity of community involvement and awareness in promoting TB control in the country. The sustainability of the network does not solely depend on the close coordination between the health providers, but also by the collective efforts of the community where the network operates.

8.1. Education and Awareness

The extent of involvement that the community will have in the SPP-DOTSLink network shall be determined by the extent of their awareness and understanding of Tuberculosis and its control. Thus, it is fundamental that the community receives proper education on TB and its cure through DOTS. Orientation seminars on SPP-DOTSLink should be conducted regularly while training programs can be done on a semi-regular schedule. Community members should also be encouraged to exercise a more active participation in SPP-DOTSLink through such ways as becoming treatment partner, treatment coordinators or members of the NA.

8.2. Participation

There are several ways wherein the community can participate and effectively contribute in the SPP-DOTSLink network. The community can directly participate through the following:

1. Collaboration with NGO

   The community's barangay health center may take the initiative to form partnerships with other NGO or socio-civic organizations. They could take the initial steps in recruiting future treatment partners. This could be done through consultations with the local treatment coordinator.

2. Collaborating with a community-based health organization or a people's organization

   The orientation of this new organization is to spearhead proper orientation and trainings for potential Treatment partners among the community.

3. Train different categories of health workers (public health nurse, midwife, and medical staff etc) as Treatment Partners

   This could be done in cooperation with PhilCAT and PhilTIPS for technical inputs.

4. Disseminate health information such as newsletters, leaflets, pamphlets, fact sheets etc.

B-9 SPP-DOTSLink Administrative System

9.1. Structure

Figure 1 Structural Organogram

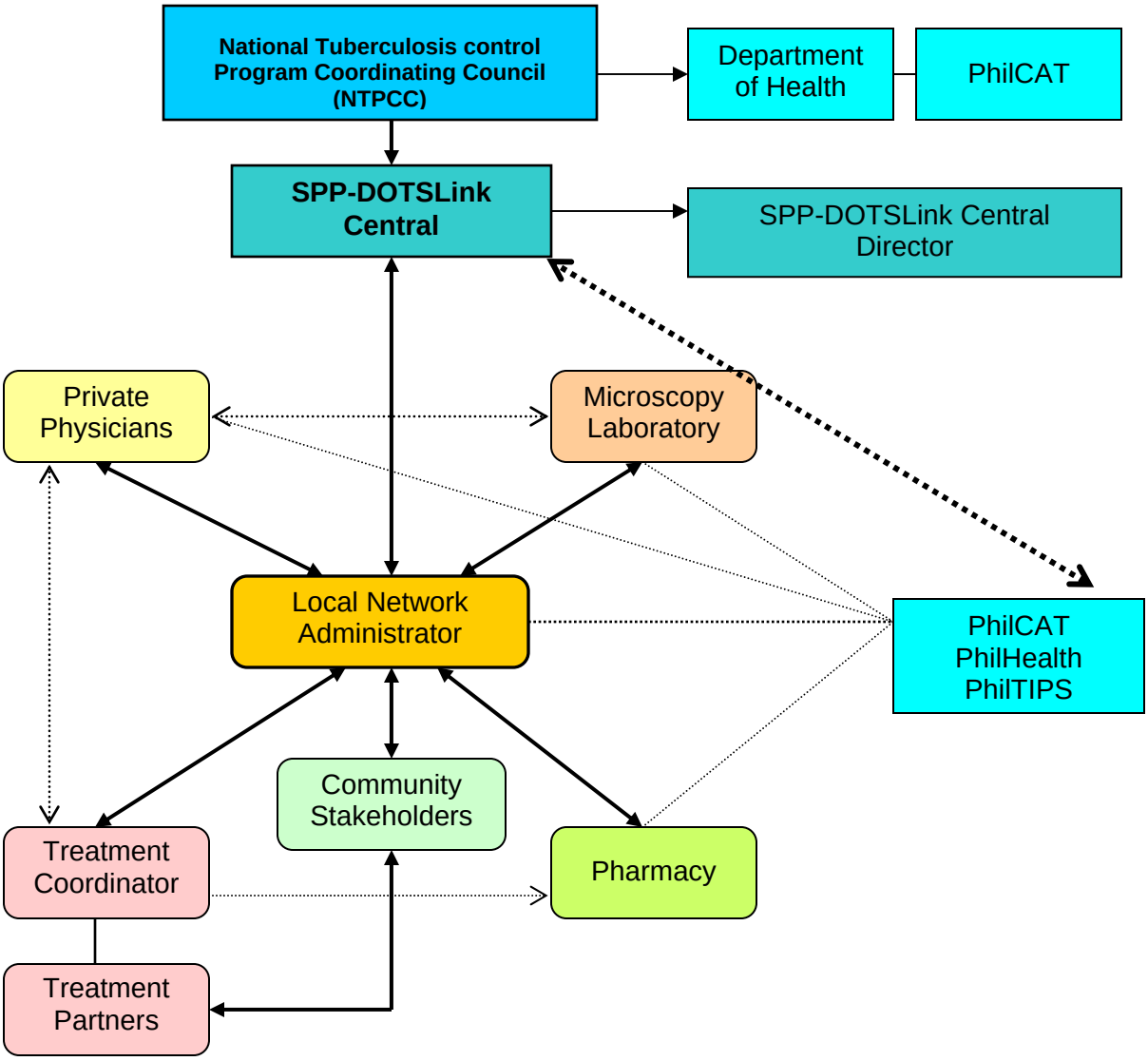
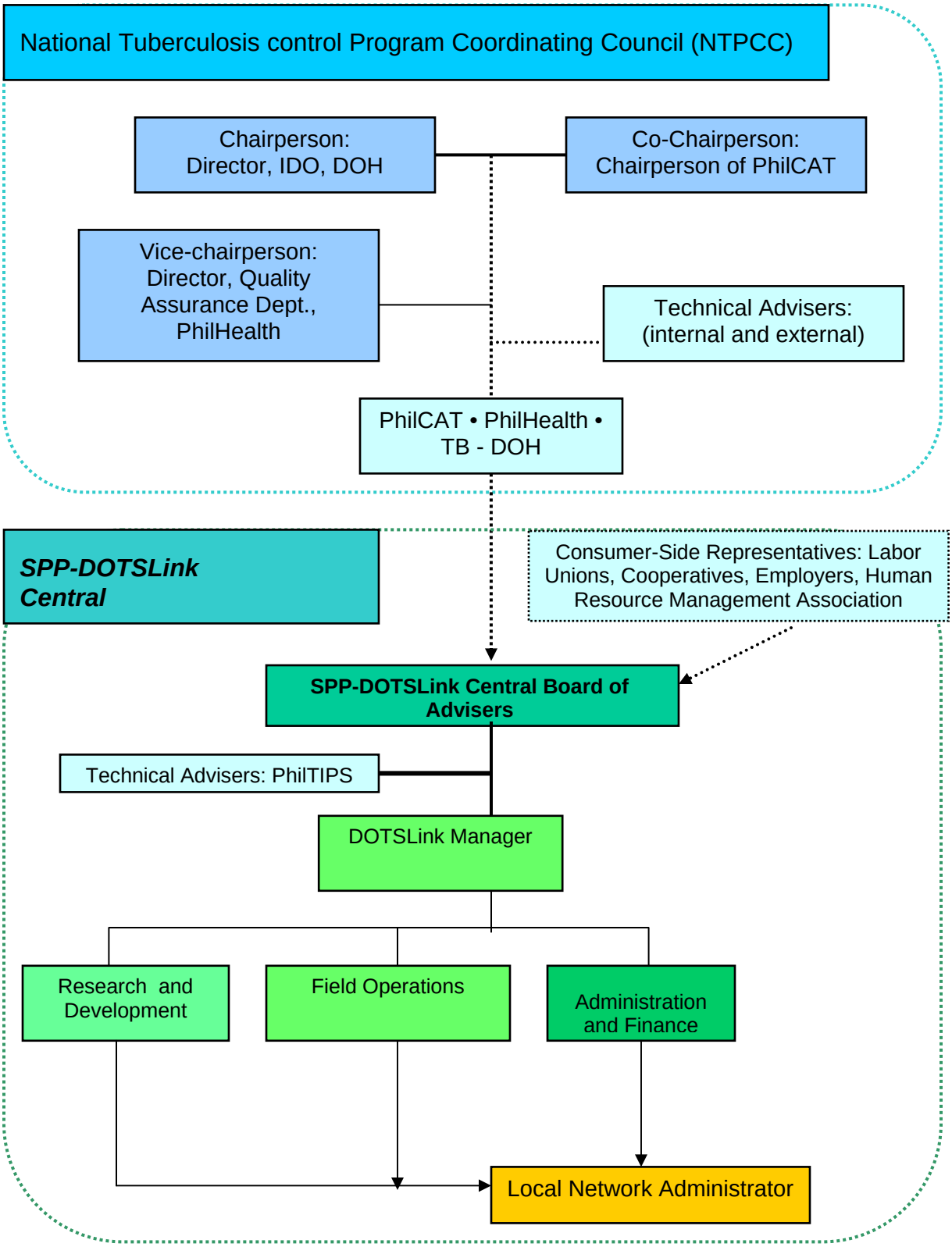


Figure 2 Administrative Structural Organogram



9.2. Personnel Requirements for the set-up of SPP-DOTSLink Central

Table 12 Personnel Roles and Resposibilities

Job Title	System	Roles & Responsibilities/Tasks
1 SPP-DOTSLink Manager - Direct and Manage the SPP-DOTSLink in its objectives	Management System	- Directs and manages the design and development SPP-DOTSLink Clusters - Responsible for setting-up SPP-DOTSLink local clusters - Ensures and motivates SPP-DOTSLink staff to effectively and efficiently carry out their responsibilities - Through the field officers, regularly evaluates the status of SPP-DOTSLink Clusters, ensuring that they meet expected outcome
	R & D System	- Responsible for the creation and development of new strategies and services that can be utilized for the SPP-DOTSLink Cluster
2 Field officers -works directly with communities' SPPs and organizations - final number dependent on number of sites	Marketing System	- Responsible for Identifying areas to setup SPP-DOTSLink Clusters - Putting up the Road shows to gain the community's interest
	Marketing System	- Acts as the consultant to the communities - Helps SPP-DOTSLink Clusters in the various areas improve the performance of their operations - Stays in regular contact with the areas by phone, e-mail, or site monitoring to identify problems, answer questions, and bring solutions and new ideas directly to the areas - Manages local training of the SPPs and organizations involved - Regularly inspect the SPP-DOTSLink Clusters, discusses any deficiencies, & makes recommendations for improvements - Reports to the SPP-DOTSLink Manager regarding the status of his/ her area's SPP-DOTSLink Cluster
1 Administrative and Finance Officer	Administrative and Financial Management system	- Makes yearly forecasts and targets, and develops a plan to achieve them; supervises overall implementation of the plan - Together with the financial officer, prepares budget and ensures sufficient allocation to vital functions - Staff development - Custodian to facilities and equipment - Manages fund & resources Prepares budget together with the SPP-DOTSLink Director and ensures, that in the least, vital functions are funded - Prepares financial report and alarms management when health fund reached threshold - Makes the necessary bookkeeping and accounting

Job Title	System	Roles & Responsibilities/Tasks
		- - Institutes financial controls and ensures compliance to them
2 PhilTIPS support		- integrates latest PhilTips outputs with DOTSLink - Gives suggestions and guidelines on how the SPP-DOTSLink clusters should work - Gives support/service - Comes up with different scenarios that will help the SPP-DOTSLink market its product

9.3. Site Selection for Pilot areas

9.3.1 Site Selection

The SPP-DOTSLink Field Officers, with direction from the Manager, must identify which communities are possible areas for SPP-DOTSLink Network. This will be based on criteria drawn up by the team, including the following:

i.) Medical needs/preferences of the community members
ii.) Paying capacity of the community members
iii.) Cost/availability of health services in the vicinity
iv.) Community's dominant characteristics
v.) Existing operations/processes in the community
viii) Availability of potential SPP-DOTSLink Physician champions
ix) Availability of potential SPP-DOTSLink consumer group champions

9.3.2 Feasibility Study

There are three types of data gathering required in determining if a SPP-DOTSLink Network is feasible in the area: Analysis of the Community Health Situation, Social Mapping and Stakeholders Analysis.

The objectives in analyzing the community's health situation are to:

1. Gain an understanding of the health needs and health status of the people in the community
2. Know the TB health services available in the community, specifically the SPPs who would be willing to be part of the SPP-DOTSLink Network
3. Know the other organizations and individuals who may be able to join the SPP-DOTSLink Network from the community and consumer side; identify potential champions
4. Assess the capabilities of existing providers to meet the standards of accreditation by the DOH and PhilCAT; identify potential champion physicians.

Doing a supply and demand analysis will help in analyzing this information. For the demand side, you will look into the health needs and paying capacity of the community. For the supply side, you will look into the existing health services and health financing services in the community.

Social mapping simply means knowing where the resources in the community come from, when they become available, and who has them.

A stakeholder analysis involves understanding the various sectors in the community, who the decision-makers are, and what motivates them.

Conducting an community analysis will also contribute in customizing some processes in the SPP-DOTSLink Network to suit the community's needs. Community Analysis is the process of gathering information about the community such as: the community culture, its existing programs and projects and work processes.

B-10 SPP-DOTSLink Advocacy Program

The SPP-DOTSLink network aims to strengthen the participation of the local sector and the community in promotion of TB care management through its advocacy program. Ideally, the structure of the advocacy is designed to enhance the linkage between the private sector and public sector. The linkage between this two sector defined by their same interests

Table 13: Advocacy Program Time Line Explained

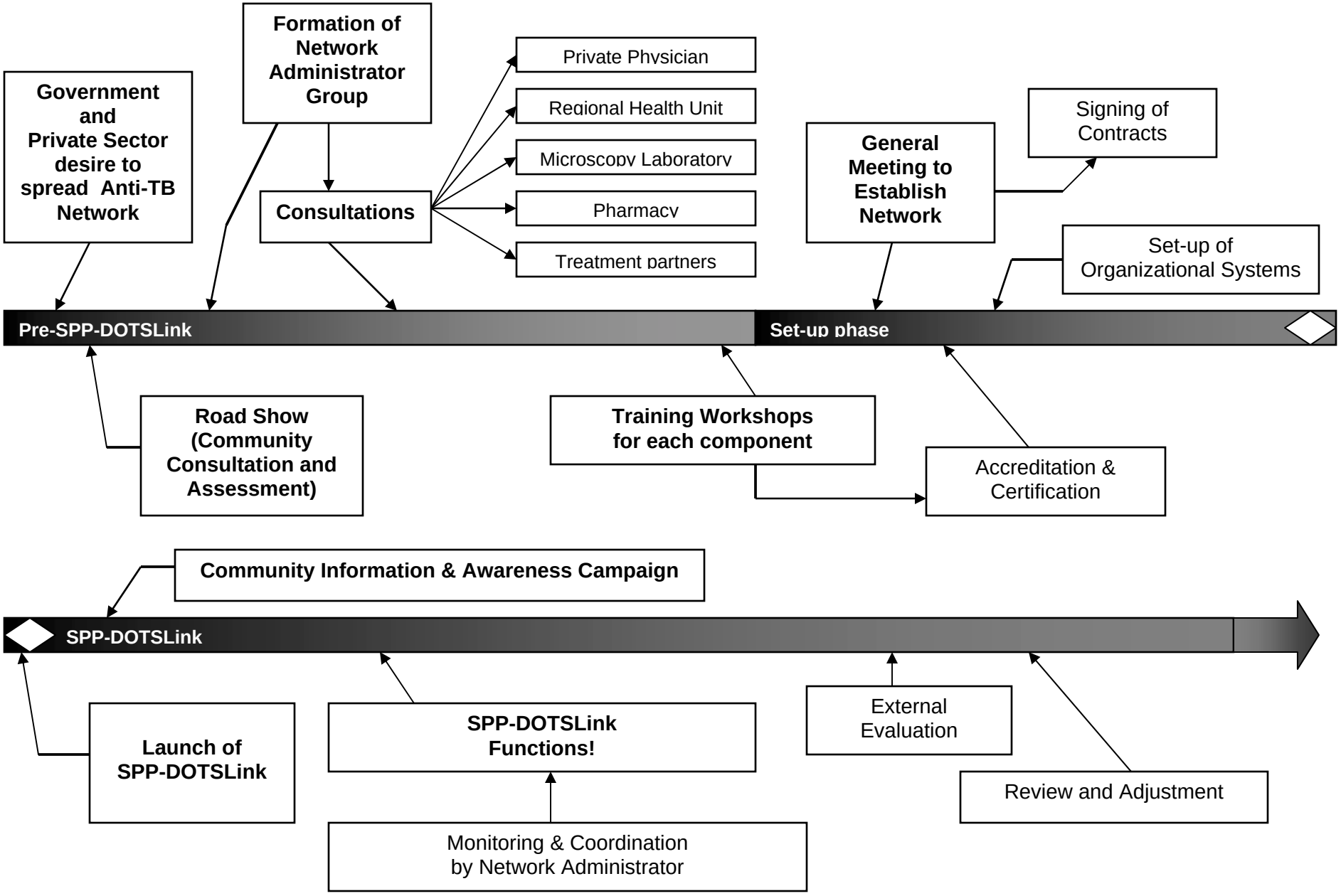
Phase	Action	Elements	Other considerations
Pre-SPP-DOTSLink	Government & Private Sector desire to spread Anti-TB Network	• Both have common goal (Anti-TB Drive) • Establish close working relationship • Sees the need to involve the private sector in the DOTS strategy • Formulates a model which private sector can adopt.	Government: • Has authority and regulatory functions • Has limited resources Private Sector: • Has capability for generating resources • Flexible / responsive

	Road Show (Community Consultation and Assessment)	A community "road show" is conducted for the following objectives: • Present DOTS as most effective regimen against TB • State intentions of establishing SPP-DOTSLink • Study its feasibility in the area • Involve the community through its representatives • Begin formation of the Network Administration group • Assess the capabilities of local private and public health providers	• Funding for the road show will be shared by both private sector and Government with the majority of funds coming from participating LGUs or DOH funds. • Must be community centered meaning the community is made aware and regularly consulted on the best way to set-up the network.
	Formation of Network Administrator Group	• Can be a coalition between private sector and members of a community (i.e. NGO, LGU, local civic organization) • Identify consumer groups to pull SPP-DOTSLink into the market. • Immediately assume roles and responsibilities regarding coordination and advocacy of SPP-DOTSLink • Prepares Business plan for individual components	• Initial funding by Government and donor funds. • Untrained members must undergo training by PhilCAT, DOH. • Establishes office at the local area with staff. • Possibility of private enterprise assuming this role. •
	Consultations with components	Network Administrator must: • arrange meetings with components • orients them to the DOTS strategy • assess each component's capability and willingness • present business plan • recruits treatment coordinators • explains incentives for each component	• Treatment Coordinators may be a separate group willing to assume the responsibility (i.e. NGOs, civic groups)

	Training workshops	• To ensure standards are met, each component must undergo training workshops to be arranged by the network administrator and provided by PhilCAT, DOH • The NA will assist the Microscopy Laboratory to source the needed instruments for sputum smear tests.	• Funding again sourced from Government • Establishment of training facility or tie-up with Regional Health Units • Devolution of training from NCR to local areas
Set-up Phase	General Meeting to establish Network	• Network Administrator organizes first formal meeting between components to discuss DOTS approach, the SPP-DOTSLink process, and proper coordination procedures. • Network Administrator explains the roles and responsibilities of each component in DOTS	• Incentives are clearly outlined • Fine tune proposed budget and expenses for each component based on consultation with components
	Signing of Contracts	• An Memorandum of Understanding (MOU) expressing commitment, support and adherence to NTP Policies and standards • A Memorandum of Agreement detailing the responsibilities and obligations of the PPMD partners and other stakeholders, including the financial commitments involved • Supply contracts for Pharmacies / Laboratories	• Facilitated by NTP Coordinating Council •
	Accreditation and Certification	• Must adhere to NTP Policies and Guidelines • PhilHealth for physicians • PhilCAT and DOTS for laboratories and pharmacies	• May be used as incentive for other Health Programs?

	Set-up of Physical Infrastructure	• Renovations for laboratories / pharmacies • Establishment of training center and local DOT meeting place • Set-up of online communications network, where possible	• Funds will be privately sourced or through government loans
SPP-DOTSLink	Launch of SPP-DOTSLink	• Start of massive community information and awareness campaign • Dry run or simulated test to check if all stations and components are in place	• Ideally coincides with important public event for maximum exposure • LGU can sponsor the cost of the launch
	SPP-DOTSLink functions	• Each components performs its role accordingly • Patient experiences the least inconvenience as he or she moves from station to station • There is regular communication among stations	• Integrate Health insurance plans to cover costs (PhilHealth, private insurance)
	Monitoring & Coordination	The Network Administrator shall: • Continue holding meetings • Monitor patients progress • Provide Treatment Partners • Monitor drug supply and release • Receives reports from stations • Prepares reports for NTP Coordinating Committee	• See SPP doc pp 13- 14
	Evaluation	• Conducted externally by a mix of public and private experts • If applicable, renewal of accreditation and certification.	• Check of funds used and of planned budget • Supervision and evaluation can be conducted by already established Regional PPMD Coordinating Committee
	Review and Adjustment	• Reviewing and adjusting the program to fit the needs of the community and the problems encountered in its pilot run.	•

Figure 3 Proposed Advocacy Program Time Line for SPP-DOTSLink



Annex A: Estimated Cost of Treatment from a DOTS Center

	Non- PhilHealth Member			PhilHealth Member	
	Upon Enrollment	After Intensive Phase	Total	Reimbursement	Actual Price
Regimen I	2,500	1,500	4,000	4,000	0
Regimen II	2.500	1,500	4,000	none	4,000
Regimen III					
30-37 Kg	2,500 + 1,064 =3,564	1,500 + 1,904 =3,404	4,000+ 2,968 =6,968	4,000	2,968
38-54 Kg	2,500 +1,596 =4,096	1,500+2,856 =4,356	4,000+4,452 =8,452	4,000	4,452
55-70 Kg	2,500+2,128 =4,628	1,500+3,808 =5,308	4,000+5,936 =9,936	4,000	5,936
>70 kg	2,500+2,660 =5,160	1,500+4,760 =6,260	4,000+7,420 =11,420	4,000	7,420

Regimen III

	Intensive Phase (2 mos) RHZ			**Maintenance Phase (4 mos) RH**			**Full Course (6 mos) 2RHZE/4RH**		
	FC Price	**Mercury Price**	**Savings**	**FC Price**	**Mercury Price**	**Savings**	**FC Price**	**Mercury Price**	**Total Savings**
	Triofix (P 9.50)	Triofix (P 10.00)		Bifix (P8.50)					
30-37 kg (2 tabs/day)	2 x P9.50 =P19.00 P19.00 x 56 =**P1,064.00**	2 x P10.00 =P20 .00 P20.00 x 56 **=P1,120.00**	P 56.00	2x P8.50 = P17.00 P17.00 x 112 **= P1,904.00**	2x P8.95 =P17.90 P17.90 x 112 **=2,004.80**	P100.80	P2,968.00	P3,124.80	**P156.80**
38-54 kg (3 tabs/day)	3 x 9.50 =P28.50 28.50 x 56 **=P1,596.00**	3 x P10.00 =P30.00 P30.00x 56 **=P1680.00**	P84.00	3 x P8.50 =P25.50 P25.50 x 112 **=P2856.00**	3x8.95 =P26.85 26.85 x 112 **=3,007.20**	P151.20	P4,452.00	P4,687.20	***P253.20***
55-70 kg (4 tabs/day)	4 x 9.50 = 38.00 P38.00 x 56 **=P2,128.00**	4 x 10.00 = P40.00 P40.00 x 56 = **P2,240.00**	P 112.00	4 x8.50 = P34.00 P34.00 x 112 **=P3,808.00**	4x8.95 =P35.80 35.80x112 **= P 4,009.6**	P201.6	P5,936.00	P6,249.60	**P313.60**
> 70 Kg (5 tabs/day)	5 x 9.50 = P47.50 47.50x56 **=P2,660.00**	5x10.00 =P50.00 50.00x56 **=P2,800.00**	P140.00	5x8.50 =P42.50 P42.50x112 =**P4,760.00**	5x8.95 =P44.75 P44.75x112 =**5,012.00**	P252.00	P7420.00	P7812.00	***P392.00***

[i] Extension of Social Protection of the Philippines, 2003. http://www.ilo.org/public/english/region/asro/manila/2003/mar/espo.htm
[ii] J. Galvez-Tan, 2003 and W. D. Salter, 1998.
[iii] ILO Southeast Asia and the Pacific Multidisciplinary Advisory Team: International OSH Programme on the Informal Sector, 1998.
[iv] Ibid.
[v] "Learning from Experience: A Gendered Approach to Social Protection for Workers in the Informal Economy," F. Lund & S. Srinivas, 2000, ILO.