



Integrating Management of TB and HIV Medicine and Commodity Supply into Regional Health Services within the SUGEMI Framework

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Introduction

Within the framework of sector reform, the Ministry of Public Health of the Dominican Republic is currently implementing its *Sistema Único de Gestión de Medicamentos e Insumos* (SUGEMI; single supply management system) in the public network of health service facilities, with the goal of improving public access to high-quality essential medicines and health supplies while promoting decentralized management and optimal use of existing resources.

Following publication of the ministerial resolution creating SUGEMI,¹ the National Pharmaceutical Management Unit (*Unidad Nacional de Gestión de Medicamentos*; UNGM), with technical assistance provided by the Strengthening Pharmaceutical Systems (SPS) and with support from the US Agency for International Development (USAID), developed operating procedures for the various components of the supply chain. SUGEMI calls for a phased-in implementation plan that prioritizes operating procedures for planning, storage, distribution, and dispensing, as well as for the supply information system. Procedures for the areas of selection, rational use, and procurement are currently being developed. The National Tuberculosis Control Program (*Programa Nacional de Control de la Tuberculosis*; PNCT) and the National Integrated Services Program for HIV and AIDS (*Programa Nacional de Atención Integral de VIH y SIDA*; PNAI) were the first programs to be integrated into SUGEMI.

This report describes the process for transferring the inventories of tuberculosis (TB) medicines and HIV medicines and supplies from the Program for Prevention of Mother-to-Child Transmission (*Prevención de Transmisión Maternoinfantil*; PTMI) and prepackaged therapy kits for the syndromic management of sexually transmitted infections (STIs), from the Provincial/Municipal Health Directorates (DPSs/DMSs) to the Regional Health Services (*Servicios Regionales de Salud*; SRSs) and activities carried out subsequent to the national inventory for integrating these inventories into SUGEMI.



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¹ Ministerial Resolution 000019, July 2010.

Taking the National Inventory

Process and Methodology

As part of the plan for implementing SUGEMI, February 15, 2012, was set as the official date for conducting the national inventory. To ensure the satisfactory completion of this process, the Administrative and Financial Vice-Ministry, the Directorate for the Development and Strengthening of Regional Health Services (*Dirección de Desarrollo y Fortalecimiento de los SRS; REDES*), and the Directorate for the Development and Strengthening of Provincial Health Directorates (*Dirección de Desarrollo y Fortalecimiento de las Direcciones Provinciales de Salud; DDS-DPS*) executed a document that stressed the priority for conducting and finalizing the national inventory no later than the above-mentioned date. This document was then distributed to all provincial and municipal directorates, regional service facilities, and national specialized health care centers and primary-level health care centers.

Toward this end, two committees were formed: (1) a national committee, under the coordination of the UNGM and with the technical participation of the PNCT, PNAI, DDF-DPS, the Administrative-Financial Vice-Ministry, auditors, the Directorate of Pharmaceutical Monitoring attached to the Vice-Ministry for Quality Assurance, and Systems for Improved Access to Pharmaceuticals and Services (SIAPS); and (2) nine regional committees coordinated by the corresponding Regional Pharmaceutical Management Units (Unidades Regionales de Gestión de Medicamentos; URGMs) and with the participation of technical, management, and administrative staff, including area managers and regional coordinators. In addition, the SUGEMI guide to conducting the national inventory and the physical integration of supplies of medicines and commodities (*Guía para el Inventario Nacional e integración física de existencias de medicamentos e insumos del SUGEMI*),² was developed, which describes the purpose, scope, staff roles, procedures, and three instruments for use in the field: Form for the National Inventory of Unexpired Drugs and Supplies; Form for the National Inventory of Expired and Damaged Drugs and Supplies, and a Model Integration Record.

The inventory was sweeping and all-encompassing in nature; that is, it included all first-line TB medicines and all supplies for PTMI and the syndromic management of STIs, both stored and temporarily in transit, whether unexpired, expired, or damaged. Only inventories of medicines and health supplies having an expiration date in excess of one month were integrated into SUGEMI. The procedure for conducting the inventory involved two stages. First was a **physical count** of all medicines and supplies on hand in the central TB and VIH stores and in the DPS/DMS stores. The physical count was followed by filling out the national inventory forms for unexpired, expired, and damaged medicines and supplies. Second was the **integration of stock on hand**. After completion of the physical count and filling out of inventory forms, an official document entitled Official Record of the Integration of Physical Stock on Hand (*Acta de Integración de Existencias Físicas*), which evidenced that the commodities remained in the custody of the individual in charge of the regional warehouse, was prepared and signed.

The procedure mandated that the DPSs/DMSs were to hand over to the applicable SRS, within a period not to exceed 10 days following conclusion of the inventory, all unexpired TB medicines and supplies, and PTMI and STI commodities, together with the corresponding inventory forms and the Integration Record, signed by the DPS/DMS director. The



² Espinoza, H. 2011. *Guía para el Inventario Nacional e Integración física de Existencias de Medicamentos e Insumos del SUGEMI*. Management Sciences for Health (MSH), Strengthening Pharmaceutical Systems (SPS).

confiscation and disposal of unusable products (expired and/or damaged) was carried out in coordination with the UNGM and the Directorate of Drugs and Pharmacy.

Results

The UNGM coordinated execution of the inventory process at the level of the central TB and HIV stores. The inventory of TB medicines and supplies was carried out by members of the staff of the Ministry of Health store, while the inventory of HIV medicines and related supplies was conducted by the private concern (YOBEL) responsible for HIV warehouse management. In both cases, a report detailing the physical count was sent to the UNGM and the General Directorate of STI and AIDS Control (*Dirección General de Control de las Infecciones de Transmisión Sexual y SIDA*; DIGECITSS). Once the inventory had been completed in these warehouses, stock on hand was to have been electronically integrated into the UNGM, which would assume responsibility for management of TB and HIV medicines and supplies, as dictated by the operating procedures established by the SUGEMI and sector reform process. For the month of April, only data for stock on hand in the TB medicine and supply warehouse were integrated into the UNGM; transfer that would enable the UNGM to monitor stock on hand and inventories in the HIV central warehouse has not yet taken place.

All of the DPSs/DMSs completed the inventory process by the date stipulated. The number of units of medicines and health supplies inventoried totaled 731,078, at an approximate cost of USD 115,746.19 (DOP 4,493,215.74), of which 680,407 units (93% percent), valued at USD 109,801.47, were unexpired at the time the inventory was conducted and 50,671 units (7 percent), valued at approximately USD 5,944.73 (DOP 215,004.27), were expired. Ninety-eight percent of the units inventoried involved TB medicines and related supplies and accounted for 83 percent of the total monetary value of the stock, while HIV medicines and supplies accounted for 2 percent of the number of units inventoried and 17 percent of the total monetary value. All of the unexpired units inventoried were transferred from the DPSs/DMSs to the appropriate SRSs. Unusable products (expired and damaged) were reported to the Directorate of Drugs and Pharmacy for subsequent confiscation and disposal.

Table 1. Consolidation showing the status of units inventoried and their value

| Status of supplies | TB | | | | HIV (PTMI and STI) | | | | Totals | | | |
|---------------------|---------|------|--------------|------|--------------------|------|--------------|------|---------|------|---------------|------|
| | Units | % | Value | % | Units | % | Value | % | Units | % | Value | % |
| Unexpired + expired | 719,634 | 98% | \$ 96,100.00 | 83% | 11,444 | 2% | \$ 19,646.19 | 17% | 731,078 | 100% | \$ 115,746.19 | 100% |
| | | | | | | | | | | | | |
| Status of supplies | TB | | | | HIV (PTMI and STI) | | | | Totals | | | |
| | Units | % | Value | % | Units | % | Value | % | Units | % | Value | % |
| Unexpired | 669,920 | 93% | \$ 91,805.87 | 96% | 10,487 | 92% | \$ 17,995.60 | 92% | 680,407 | 93% | \$ 109,801.47 | 95% |
| Expired | 49,714 | 7% | \$ 4,294.14 | 4% | 957 | 8% | \$ 1,650.59 | 8% | 50,671 | 7% | \$ 5,944.73 | 5% |
| Totals | 719,634 | 100% | \$ 96,100.00 | 100% | 11,444 | 100% | \$ 19,646.19 | 100% | 731,078 | 100% | \$ 115,746 | 100% |

The products accounting for the greatest number of expired units were ethambutol 400 mg tablets, rifampicin 300 mg tablets, and pyrazinamide 500 mg tablets. These three medicines account for 97 percent of all expired products (Table 2).

Table 2. National consolidation showing the monetary value of units inventoried and transferred from DPSs/DMSs to SRSs

| Report of PNCT, PTMI, and STI supplies transferred from DPSs/DMSs and their status | | | | | | | | |
|--|---------|----------------|---------------|------------------------------|-----------------|----------------------|--------------------|----------------------|
| Product/Description | Program | Products | | Total units received at SRSs | Unit cost (USD) | Product cost (USD) | | Total cost (USD) |
| | | Unexpired | Expired | | | Unexpired | Expired | |
| Ethambutol (E) 400 mg tablet/blister pack | PNCT | 89,749 | 9,627 | 99,376 | 0.06 | \$ 5,760.53 | \$ 617.91 | \$ 6,378.43 |
| Rifampicin/isoniazid (RH) 150/150 mg tablets/blister pack | PNCT | 174,711 | | 174,711 | 0.09 | \$ 16,147.87 | \$ - | \$ 16,147.87 |
| Rifampicin/isoniazid (RH) 150/75 mg tablets/blister pack | PNCT | 39,542 | | 39,542 | 0.39 | \$ 15,421.38 | \$ - | \$ 15,421.38 |
| Isoniazid (H) 100 mg tablet/blister pack | PNCT | 24,740 | 600 | 25,340 | 0.23 | \$ 5,690.20 | \$ 138.00 | \$ 5,828.20 |
| Isoniazid (H) 300 mg tablet/blister pack | PNCT | 96,894 | | 96,894 | 0.02 | \$ 1,990.12 | \$ - | \$ 1,990.12 |
| Rifampicin (R) 300 mg tablets/blister pack | PNCT | 26,031 | 34,971 | 61,002 | 0.06 | \$ 1,561.86 | \$ 2,098.26 | \$ 3,660.12 |
| Rifampicin/isoniazid/pyrazinamide/ethambutol (RHZE) 150/75/400/275 mg tablets/blister pack | PNCT | 156,965 | | 156,965 | 0.20 | \$ 31,393.00 | \$ - | \$ 31,393.00 |
| Streptomycin (S) 1 g vial | PNCT | 3,228 | 939 | 4,167 | 0.80 | \$ 2,582.40 | \$ 751.20 | \$ 3,333.60 |
| Pyrazinamide (Z) 400 mg tablet/blister pack | PNCT | 19,192 | | 19,192 | 0.19 | \$ 3,695.51 | \$ - | \$ 3,695.51 |
| Pyrazinamide (Z) 500 mg tablet/blister pack | PNCT | 32,228 | 3,577 | 35,805 | 0.19 | \$ 6,205.65 | \$ 688.77 | \$ 6,894.42 |
| Distilled water vials | PNCT | 2,538 | | 2,538 | 0.14 | \$ 345.35 | \$ - | \$ 345.35 |
| Syringes 5 mL | PNCT | 1,692 | | 1,692 | 0.09 | \$ 147.70 | \$ - | \$ 147.70 |
| Flasks for bacilloscopy | PNCT | 2,345 | | 2,345 | 0.35 | \$ 827.82 | \$ - | \$ 827.82 |
| Glasses | PNCT | 24 | | 24 | 1.52 | \$ 36.48 | \$ - | \$ 36.48 |
| Wooden applicator | PNCT | 41 | | 41 | N/D | \$ - | \$ - | \$ - |
| Disposable gloves | PTMI | 1 | | 1 | 3.28 | \$ 3.28 | \$ - | \$ 3.28 |
| Gowns | PTMI | 7 | 16 | 23 | 0.89 | \$ 6.23 | \$ 14.24 | \$ 20.47 |
| Bath set | PTMI | 18 | | 18 | 29.02 | \$ 522.36 | \$ - | \$ 522.36 |
| Surgical kits | PTMI | 34 | | 34 | N/D | \$ - | \$ - | \$ - |
| Infant formula | PTMI | 2,276 | | 2,276 | 4.20 | \$ 9,559.20 | \$ - | \$ 9,559.20 |
| Surgical masks | PTMI | 150 | | 150 | 3.69 | \$ 553.50 | \$ - | \$ 553.50 |
| Pots | PTMI | 15 | | 15 | 6.50 | \$ 97.50 | \$ - | \$ 97.50 |
| Zidovudine suspension 50 mg/5 mL vial | PTMI | 72 | 108 | 180 | 2.14 | \$ 154.08 | \$ 231.12 | \$ 385.20 |
| Nevirapine 50 mg susp. Flask | PNAI | 0 | 56 | 56 | 1.94 | \$ - | \$ 108.64 | \$ 108.64 |
| Lopinavir/ritonavir 200 mg + 50 mg vial x 120 tablets | PNAI | 18 | | 18 | 32.65 | \$ 587.70 | \$ - | \$ 587.70 |
| Nevirapine 200 mg vial x 60 tablets | PNAI | 42 | 12 | 54 | 2.49 | \$ 104.58 | \$ 29.88 | \$ 134.46 |
| Zidovudine/lamivudine 300 mg + 150 mg vial x 60 tablets | PNAI | 14 | | 14 | 7.90 | \$ 110.60 | \$ - | \$ 110.60 |
| Lamivudine/zidovudine 150 mg + 300 mg vial x 60 tablets | PNAI | 7 | | 7 | 8.10 | \$ 56.70 | \$ - | \$ 56.70 |
| Lamivudine 150 mg vial x 60 tablets | PNAI | 20 | | 20 | 2.03 | \$ 40.60 | \$ - | \$ 40.60 |
| Stavudine 30 mg vial x 60 tablets | PNAI | 0 | 170 | 170 | 1.60 | \$ - | \$ 272.00 | \$ 272.00 |
| Acute test kit x 100 tests | PNAI | 60 | | 60 | 1.39 | \$ 83.40 | \$ - | \$ 83.40 |
| Determine test kit x 100 tests | PNAI | 4,278 | | 4,278 | 0.65 | \$ 2,780.70 | \$ - | \$ 2,780.70 |
| Retrocheck test kit x 100 tests | PNAI | 2,655 | | 2,655 | 0.65 | \$ 1,725.75 | \$ - | \$ 1,725.75 |
| Prepackaged therapy kit - urethral discharge | STI | 236 | 78 | 314 | 1.93 | \$ 455.48 | \$ 150.54 | \$ 606.02 |
| Prepackaged therapy kit - genital ulcer | STI | 341 | 16 | 357 | 1.56 | \$ 531.96 | \$ 24.96 | \$ 556.92 |
| Prepackaged therapy kit - vaginal discharge-cervicitis | STI | 143 | 18 | 161 | 2.86 | \$ 408.98 | \$ 51.48 | \$ 460.46 |
| Prepackaged therapy kit - lower abdominal pain | STI | 100 | 25 | 125 | 2.13 | \$ 213.00 | \$ 53.25 | \$ 266.25 |
| Prepackaged therapy kit - vaginal discharge-vaginitis | STI | 0 | 458 | 458 | 1.56 | \$ - | \$ 714.48 | \$ 714.48 |
| | | 680,407 | 50,671 | 731,078 | | \$ 109,801.47 | \$ 5,944.73 | \$ 115,746.19 |

Sources of cost data: COPRESIDA/GF Global Fund Procurement and Supply Plan 2011–2012; 2012; GDF pro forma for purchasing first-line TB medicines.

Medicines and Supplies Used by the PNCT

Of the total number of first-line medicines for treating TB, only seven (70 percent) were available in the central warehouse when the national inventory was conducted in February 2012. On that date, ethambutol 400 mg had fewer than three months' (consumption) stock on hand, while streptomycin 1 g and pyrazinamide 400 mg had zero availability (Table 3).

In early May 2012, a physical count taken of TB medicines showed available stock on hand in the central warehouse for seven (70 percent) of those drugs. Availability expressed in number of months' consumption for the total number of medicines averaged 5.1 months (with a median of two months). The inventory report as of May shows five medicines, including ethambutol 400 mg, isoniazid 100 mg, streptomycin 1 g, and pyrazinamide 400



mg, for which current availability was zero or less than one months' consumption. The PNCT reported that it is awaiting arrival of pending orders submitted to the Global Drug Facility and scheduled for delivery in the second week of May 2012. The UNGM will update its monthly availability data as soon as these medicines arrive at the central warehouse.

Table 3. TB medicines on hand in the central warehouse during the February 2012 national inventory and availability as of May 2012

| Product description | Program | National stock on hand February 2012 (central warehouse) | National stock on hand May 2012 (central warehouse) | Average monthly consumption* | Availability in months (May 2012) |
|--|---------|--|---|------------------------------|-----------------------------------|
| Ethambutol (E) 400 mg tablets/blister pack | PNCT | 98,124 | 0 | 36,300 | 0.0 |
| Rifampicin/isoniazid (RH) 150/150 mg tablets/blister pack | PNCT | 149,222 | 1,057,131 | 136,300 | 7.8 |
| Rifampicin/isoniazid (RH) 150/75 mg tablets/blister pack | PNCT | 0 | 13,426 | 6,817 | 2.0 |
| Isoniazid (H) 100 mg tablet/blister pack | PNCT | 31,980 | 1,994 | 32,670 | 0.1 |
| Isoniazid (H) 300 mg tablet/blister pack | PNCT | 1,438,360 | 918,138 | 36,300 | 25.3 |
| Rifampicin (R) 300 mg tablet/blister pack | PNCT | 457,600 | 339,690 | 36,300 | 9.4 |
| Rifampicin/isoniazid/pyrazinamide/ethambutol (RHZE) 150/75/400/275 mg tablets/blister pack | PNCT | 90,689 | 873,058 | 136,300 | 6.4 |
| Streptomycin (S) 1 g vials | PNCT | 0 | 800 | 17,825 | 0.0 |
| Pyrazinamide (Z) 400 mg tablet/blister pack | PNCT | 0 | 0 | 27,225 | 0.0 |
| Pyrazinamide (Z) 500 mg tablets/blister pack | PNCT | 14,062 | 0 | 27,225 | 0.0 |
| Distilled water | PNCT | 28,466 | 30,000 | 17,825 | 1.7 |
| Syringes, 5 mL | PNCT | 47,324 | 40,469 | 17,825 | 2.3 |
| Flasks for bacilloscopy | PNCT | 0 | 0 | NA | NA |
| Glasses | PNCT | 0 | 0 | NA | NA |
| Wooden applicator | PNCT | 0 | 0 | NA | NA |

*Sources: (1) Assignment Schedule – SUGEMI, May–July 2012 quarter; (2) TB and HIV Strategic Information System, from SUGEMI report of December 2011; (3) planning matrix for TB medicines to be purchased from the GDF, 2012.
NA = not available.

Of all DPSs/DMSs, only 26 (68 percent) transferred all of their first-line TB medicines to the corresponding SRS. Average transfer time was five days following the date inventory was taken, as indicated on the signed record of integration and the inventory forms, all duly completed, signed, and sealed. Twelve DPSs/DMSs (32 percent) conducted the inventory but did not physically transfer their medicines and supplies to the SRS, having opted to distribute all medicines and supplies to health facilities before the national inventory, leaving them with zero stock on hand in their warehouses. Six (67 percent) of the DMSs transferred their stocks of first-line TB medicines and related supplies to the Metropolitan Regional Service, and three DMSs conducted an inventory but did not deliver records of integration to the SRS. Three months following completion of the national inventory, 100 percent of all DPSs and DMSs now have zero first-line TB medicines on hand in their warehouses.

A total of 669,920 units of TB unexpired medicines and supplies were found, while 49,714 had already expired. The expired products included 9,627 tablets of ethambutol 400 mg, 34,971 tablets of rifampicin 300 mg, and 939 vials of streptomycin 1 g (Table 2).

Medicines and supplies for PTMI

Of the total medicines and supplies for the PTMI program, only five (62 percent) were available in the central warehouse at the time the national inventory was conducted. As of that date, breast milk substitute, or baby formula, and zidovudine syrup 50 mg/5 mL

showed stock on hand of less than one months' consumption. As of May 2012, four (50 percent) PTMI medicines and supplies were available in the central warehouse. In terms of number of months' consumption, availability for all PTMI medicines and supplies averaged 2.4 months (with a median of 0.4 months). The May 2012 inventory report shows five medicines with zero or less than one month's consumption on hand, including baby formula and fungibles (Table 4).

Table 4. PTMI stock on hand in the central warehouse during the February 2012 national inventory and availability as of May 2012

| Product description | Program | National stock on hand February 2012 (central warehouse) | National stock on hand May 2012 (central warehouse) | Average monthly consumption* | Availability in months (May 2012) |
|---------------------------------------|---------|--|---|------------------------------|-----------------------------------|
| Disposable gloves | PTMI | 3,864 | 0 | NA | NA |
| Gowns | PTMI | 6 | 0 | 1,053 | 0.0 |
| Bath set | PTMI | 371 | 270 | 351 | 0.8 |
| Surgical kit | PTMI | 0 | 0 | 351 | 0.0 |
| Baby formula | PTMI | 916 | 22,597 | 15,444 | 1.5 |
| Surgical masks | PTMI | 4,924 | 4,791 | 351 | 13.6 |
| Pots | PTMI | 0 | 0 | 351 | 0.0 |
| Zidovudine oral suspension 50 mg/5 mL | PTMI | 368 | 1,117 | 323 | 3.5 |

NA = not available.

A total of 11 DPSs/DMSs (29 percent) transferred PTMI medicines and supplies during the national inventory in accordance with established procedures. The following reasons, collected from the regional inventory reports, explain why the remaining DPSs/DMSs failed to transfer stock on hand: no stock on hand of program medicines and supplies in their warehouses as of the inventory date (stockouts), and distribution of stock on hand to health facilities prior to taking inventory. Only SRS VIII (La Vega) reported not having received medicines or supplies from any of its three DPSs because for more than a year, this regional service has been managing PTMI products from the URG. One percent of all units transferred during the national inventory were for the PTMI.

Nationally, of the PTMI medicines and supplies received at the SRSs, a total of 10,789 units were unexpired, whereas 359 units had expired. The expired products included 108 ampoules of zidovudine 50 mg/5 mL suspension and 509 vials of nevirapine 50 mg suspension (Table 2). The products most often found absent in most of the warehouses inventoried involved health supplies (gowns and gloves), baby formula, and zidovudine suspension.

Medicines and supplies for treating STIs

Of the total prepackaged therapy kits for the syndromic management of STIs, none were available in the central warehouse at the time the national inventory was taken. As of May, stock on hand in the central warehouse was one kit (20 percent). It was not possible to calculate availability in terms of number of months' consumption because of lack of information. The May 2012 inventory report indicates four types of kits showing zero stock on hand and only 2,000 kits available for treating acute abdominal pain (Table 5).

Table 5. Stock on hand of STI kits in the central warehouse during the February 2012 national inventory and availability as of May 2012

| Product description | Program | National stock on hand February 2012 (central warehouse) | National stock on hand May 2012 (central warehouse) | Average monthly consumption* | Availability in months (May 2012) |
|--|---------|--|---|------------------------------|-----------------------------------|
| Prepackaged therapy kit - urethral discharge | STI | 0 | 0 | NA | NA |
| Prepackaged therapy kit - genital ulcer | STI | 0 | 0 | NA | NA |
| Prepackaged therapy kit - vaginal discharge-cervicitis | STI | 0 | 0 | NA | NA |
| Prepackaged therapy kit - lower abdominal pain | STI | 0 | 2,000 | NA | NA |
| Prepackaged therapy kit - vaginal discharge-vaginitis | STI | 0 | 0 | NA | NA |

NA = not available.

Of all DPSs/DMSs, only one (3 percent) transferred STI medicines and supplies during the inventory in accordance with established procedures. The regional inventory reports gave the following reason why the remaining DPSs/DMSs failed to transfer stock on hand: stockouts of prepackaged therapy kits in their warehouses as of the date of the inventory. Most DPSs/DMSs indicated that they had not received these supplies from the central level for more than 10 months. One percent of all units transferred during the national inventory were for treatment of STIs. Nationally, of the STI medicines and supplies received at the SRSs, a total of 820 units were unexpired, whereas 595 units had already expired. The expired products included 458 kits for treating vaginal discharge/vaginitis, 78 kits for treating urethral discharge, and 25 kits for treating lower abdominal pain (Table 2).

Steps for Integration and Operation of SUGEMI

The SUGEMI distribution procedure dictates that delivery of medicines and supplies for special or collective health programs from the SRSs to health facilities is to take place by means of assignment, using the assignment schedule (SUGEMI 3 form), in coordination with the DPSs/DMSs.

Upon completion of the input of data from the national inventory forms received from the DPSs/DMSs, steps were taken to integrate the stocks received of TB, PTMI, and STI medicines and supplies into the inventories of the corresponding SRSs. From that moment, future distribution of these products to health facilities became a responsibility of the SRSs, specifically the URGMs, as mandated by SUGEMI and the sector reform process.

Nine regional workshops were held for the purpose of supporting the URGMs in preparing the schedules for assigning TB, PTMI, and STI medicines and supplies. These workshops were held with the participation of the TB and HIV coordinators for each of the country's DPSs/DMSs, as well as members of the central-level technical staff of both programs. Participants were asked to take to the workshops any available data showing estimated cases per health facility for either one year or one quarter. Data on cases of TB were easily obtained from the program's quarterly operating reports, prepared at both the local and central levels. However, no data were obtained from the DPSs/DMSs for cases of PTMI and STIs. Accordingly, DIGECITSS had to provide consolidated data for preparation of the HIV assignment schedules.

So far, TB assignment schedules have been prepared, and the URGMs have begun distribution from the SRSs to health facilities, as mandated by SUGEMI procedures. Adjustments were made for amounts sent from the central level to the SRSs, based on availability in the central warehouse (see Table 3).



As regards HIV, assignment schedules have been prepared for PTMI and STI supplies, so that SRSs can now begin distribution to health facilities no later than the third week of May, subject to central warehouse availability. Distribution of antiretrovirals (ARVs) is still centralized, not yet having been delegated to the SRSs, with the transfer scheduled to take place sometime during the last quarter of 2012. Now that the National Inventory has concluded, DIGECITSS no longer carries out the distribution of these drugs and supplies; instead, this responsibility falls to the UNGM. At present, ARVs are being distributed to local health facilities through the UNGM, in coordination with DIGECITSS.

Conclusion and Recommendations

Conclusion

The process of taking an inventory and subsequently transferring first-line TB, PTMI, and STI medicines and related supplies from the DPSs/DMSs to the SRSs was carried out successfully during the national inventory exercise. At the central level, management of TB supplies was transferred to the UNGM, but the transfer of supply management for HIV program products remains pending. Integration of TB products took place in accordance with the steps established for the transfer process, including management of the Ministry of Health's TB central warehouse. However, the supply management transfer of responsibility to UNGM did not take place for HIV because the UNGM did not obtain authorization to manage inventories of the YOBEL central warehouse.

The central warehouse has zero stock on hand of certain prepackaged therapy kits, medicines, and supplies for the PTMI program, and of some medicines and supplies used to diagnose, treat, and prevent transmission of TB. This situation has prevented immediate distribution from the SRSs to health facilities of the quantities established in the assignment schedules for some products. Currently, the unavailable TB medicines have been delivered by the purchasing agent, and the UNGM has completed orders for the SRSs, and these in turn have sent orders to the health care facilities. In the case of HIV products, the medicines have not arrived, nor is adequate information available on the procurement process.

Recommendations

- Complete the transfer of inventory management for the YOBEL central warehouse to the UNGM as soon as possible. This transfer should become effective upon completion of the following steps:
 - CONAVIHSIDA, currently responsible for purchasing and management of HIV medicines in the HIV central warehouse in its role as Principal Recipient of funds to finance this component, should effectively complete transfer of control of the YOBEL central warehouse to UNGM. CONAVIHSIDA should inform/authorize YOBEL by written communication with a copy to REDES that UNGM or its designees will be filling orders and monitoring inventory so that YOBEL is informed of the new signatories.
 - UNGM/REDES will authorize filling of orders from YOBEL, using the "dispatch order" form describing the product, quantities, lot numbers, and destination.
- Because the PNAI's current inventory system has a standard form meeting the dispatch requirements, this system should be transferred to UNGM/REDES as a short-term measure until REDES establishes an official system of deliveries to the SRSs, which will be part of the integrated information system of SUGEMI in REDES.

- Since information on the status of medicines in the process of procurement can affect the quantities assigned for distribution at all levels of the supply chain (delivery of medicines to patients as well as inventory levels at health facilities and regional warehouses), the following is recommended for financial bodies and those involved in the purchasing process:
 - Follow up on orders of HIV and TB medicines and supplies to keep informed of the status of purchases and estimated date of delivery.
 - Forward supporting documents (pro formas, manifests, invoices) to UNGM/REDES so they can make timely decisions and take necessary action to ensure uninterrupted supply.

- Establish a process for monitoring distribution TB, PTMI, and STI medicines and supplies through the SUGEMI's supervision mechanisms to ensure compliance with operating procedures, continuing to transfer responsibility to the following corresponding structures:
 - From UNGM/REDES to the URGMs/SRSs to monitor ongoing compliance with procedures.
 - From the SRSs to the health facilities to ensure compliance with procedures.
 - Transfer capacity and define tools for the DPS/DMSs in its governing role to supervise the whole supply chain and be aware of the availability and access to medicines and supplies of Special Programs by the priority populations.

- Finalize the inventory process and digitization of the SRS records so that the national inventory report on TB and HIV medicines in health facilities can be disseminated. This inventory report will provide information for taking general measures to ensure the availability of supplies at the local level when faced with potential stockouts at the national level.

- Prepare a progress report detailing the number of units of TB, PTMI, and STI products distributed from SRSs to local health facilities, as well as progress recorded in properly managing the supply of these products received from the SRSs.