



Programming the Purchase of Medicines and Supplies in the Dominican Republic's Public Health System

August 2014



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The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

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ACRONYMS AND ABBREVIATIONS

CEAS	<i>Centro Especializado de Atención en Salud</i> (Specialized Health Care Center)
CPN	<i>Centro de Primer Nivel de Atención</i> (Primary Health Care Center)
DOP	Dominican pesos
MPH	Ministry of Public Health
PCE	<i>Programa de Control de Enfermedades</i> (disease control program)
PROMESE/CAL	<i>Programa de Medicamentos Esenciales y Central de Abastecimiento Logístico</i> (Program of Essential Medicines/Center for Logistical Support)
SENASA	<i>Seguro Nacional de Salud</i> (National Health Insurance)
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SRS	Regional Health Service
SUGEMI	<i>Sistema Único de Gestión de Medicamentos e Insumos</i> (Integrated System for Medicine and Supply Management)
UNGM	<i>Unidad Nacional de Gestión de Medicamentos</i> (National Pharmaceutical Management Unit)
USD	US dollars

BACKGROUND

Until 2010, estimates and programming for the purchase of medicines and supplies in the Dominican Republic's public health sector were carried out by each individual health facility, without the benefit of a standardized methodology. In 2011, within the framework for implementation of an Integrated System for Medicine and Supply Management (*Sistema Único de Gestión de Medicamentos e Insumos*; SUGEMI), the National Pharmaceutical Management Unit (*Unidad Nacional de Gestión de Medicamentos*; UNGM) of the Ministry of Public Health (MPH), launched, with support provided by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, a series of national procurement programming exercises, using a standardized methodology. These exercises required the prior drafting of a procurement estimating and programming manual (*Manual de Estimación y Programación para la Compra*),¹ followed by catalogs of medicines, medical-surgical materials, and laboratory reagents and other supplies.

The programming exercises carried out to date have consisted of four stages:

1. **Preparation:** Distribution to health care units of electronic forms and matrices for gathering, organizing, and reviewing information on procurement prices, historic consumption (for the preceding three-year period), warehouse stock on hand, and purchase orders being processed. During this stage, UNGM technical staff resolve any issues detected to standardize the data entry in the electronic matrices.
2. **National programming workshop:** Three-day meeting with health care unit teams charged with managing the supply of medicines, commodities, and laboratory materials. Following a brief orientation on the methodology to be used, the working teams estimate purchasing requirements for the ensuing year. Technical staff from the Program of Essential Medicines/Center for Logistical Support (*Programa de Medicamentos Esenciales y Central de Abastecimiento Logístico*; PROMESE/CAL) and SIAPS provide the working teams with advisory assistance in applying statistical procedures that will ensure greater accuracy in their estimates.
3. **Review and consolidation of the programming matrices:** Prior to consolidation, all programming matrices are reviewed to ensure they have been completed using the same guidelines and that no errors in calculation have been made.
4. **Presentation of results to decision makers, drafting of reports, and presentation to authorities:** The preliminary results of the programming exercise are presented to, and discussed with, decision makers for possible subsequent modification and validation. The reports are then forwarded to the appropriate authorities for inclusion of the planned amounts in the MPH budget for the following fiscal year.

The programming exercises began to incorporate a gradually increasing number of health care units and disease control programs (*Programas de Control de Enfermedades*; PCEs). In 2013, in

¹ Link to the Programming Manual on the SUGEMI website: <http://www.msp.gob.do/documentos-sugemi>

response to Presidential Decree 608-13, which mandated joint procurement of medicines and supplies for the public sector, the programming exercise involved five agencies² in addition to the MPH. Table 1 shows a timeline for the programming exercises carried out to date.

Table 1. Exercises for Programming the Purchase of Medicines and Supplies

Programming year	Participating agencies	Total items programmed	Amounts programmed (DOP, millions)	Items purchased by PROMESE	Millions of DOP	Items purchased at the decentralized level	Millions of DOP
2012	21	990	1,601	660 (67%)	1,141 (71%)	330 (33%)	459 (29%)
2013	21	808	1,379	478 (59%)	943 (68%)	330 (41%)	435 (32%)
2014	27	1,032	2,085	808 (78%)	1,860 (89%)	224 (22%)	225 (11%)
2015	39	1,493	2,439	495 (33%)	1,956 (80%)	998 (67%)	483 (20%)

² These agencies were as follows: *Farmacias del Pueblo* (People's Pharmacies), the Armed Forces, the National Police Force, the Dominican Social Security Institute (*Instituto Dominicano de Seguros Sociales*), PROMESE/CAL Social Programs, and the Social Plan of the Office of the President.

DETECTION AND CLOSING OF FINANCIAL GAPS IN THE FINANCING OF MEDICINES AND SUPPLIES FOR THE PUBLIC SECTOR

These programming exercises, carried out using a standardized methodology, made it possible to ascertain for the first time that the resources allocated by the Ministry of Finance were insufficient to finance the needs for medicines and supplies as estimated in the programming exercises.

The 2012 exercise identified a gap of USD 3.8 million in the financing of antiretrovirals. Lobbying and advocacy efforts carried out by the National Council on HIV and AIDS and by the UNGM, with support provided by SIAPS, led to the mobilization of national and international resources focused on closing this gap.³ The 2013 programming exercise identified a gap for the HIV/AIDS Program that increased to USD 6 million as a result of the decrease in grant funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria, plus the inclusion in the estimates of reagents and diagnostic materials and an increase in safety stock. This gap was covered by the allocation of budget funds to the MPH. The combination of more accurate programming exercises, timely management of financial resources, and improved distribution mechanisms have made it possible to increase the availability of antiretrovirals in health care units.⁴

However, the Specialized Health Care Centers (*Centros Especializados de Atención en Salud*; CEASs) and Primary Health Care Centers (*Centros de Primer Nivel de Atención*; CPNs) did not increase their availability of essential medicines to the same degree. The SUGEMI quarterly newsletter reported that in January 2014 the shortage of essential medicines in health care units amounted to 16%.⁵ This situation led to a study of the financial gaps that would need to be closed to satisfy requirements for medicines and supplies for the national public health system in 2014.

Financial Gap in Financing Public Health System Medicines and Supplies in 2014

The study showed that the financing required to cover the costs of medicines and supplies programmed for purchase in 2014 for the entire public health sector totals DOP 9.772 billion (USD 227 million). The government's income and expense budget allocated a total of DOP 4.858 billion (USD 113 million), resulting in a financial gap totaling DOP 4.914 billion (USD 114 million) (table 2).

³ Reevaluation of the HIV Financing Gap in the Framework of SUGEMI Planning for 2013, <http://siapsprogram.org/publication/reevaluation-of-the-hiv-financing-gap-in-the-framework-of-sugemi-planning-for-2013/>

⁴ Incorporation of the Supply of Antiretrovirals into the Dominican Republic's Integrated Management System for Pharmaceuticals and Medical Supplies, <http://siapsprogram.org/publication/incorporation-of-the-supply-of-antiretrovirals-into-the-dominican-republics-integrated-management-system-for-pharmaceuticals-and-medical-supplies/>

⁵ *Boletín trimestral de Información Estratégica del SUGEMI* (December 2013), volume 2, no. 4, <http://www.msp.gob.do/sugemi/boletines/diciembre2013.pdf>

Of this gap, 72% (DOP 3.558 billion; USD 83 million) is associated with MPH programs, primarily Protected Diseases, CEASs, and CPNs, while 28% (DOP 1.357 billion; USD 31 million) is associated with other public sector institutions, primarily *Farmacias del Pueblo* and PROMESE/CAL Social Programs (table 2).

Table 2. Financial Gap for the Purchase of Public Health Sector Medicines and Supplies, 2014

	Programmed for 2014 (SUGEMI)	Allocated for 2014	Financial gap for purchases as programmed	Percentage
Ministry of Health	7,712,969,640	4,155,258,296	3,557,711,344	72.39
Other public sector institutions	2,059,795,427	703,196,907	1,356,598,520	27.61
Total public sector	9,772,765,067	4,858,455,203	4,914,309,864	100.00
Conversion to USD		USD (DOP 43 x USD 1)	114,286,276	

MPH Financial Gap

Of the financial gap associated with the MPH (DOP 3.558 billion; USD 83 million), 55% involves the Protected Diseases Program (DOP 2.687 billion; USD 62 million). The amount planned for this program was DOP 4.803 billion (USD 112 million), while the amount allocated was DOP 2.116 billion (USD 50 million). Some 14% of the financial gap involves the CEASs (DOP 477 million; USD 11 million) and the CPNs (DOP 219 million; USD 5 million). No gaps are associated with the HIV/AIDS Program or the Expanded Program on Immunization, because adequate budget funds have been allocated to these two programs⁶ (table 3).

⁶ Incorporation of the Supply of Antiretrovirals into the Dominican Republic's Integrated Management System for Pharmaceuticals and Medical Supplies, <http://siapsprogram.org/publication/incorporation-of-the-supply-of-antiretrovirals-into-the-dominican-republics-integrated-management-system-for-pharmaceuticals-and-medical-supplies/>

Table 3. Financial Gap for the Purchase of Medicines and Supplies for the MPH

	Programmed for 2014 (SUGEMI)	Allocated for 2014	Financial gap for purchases as programmed	Percentage of national gap
Hospitals	1,317,004,428	840,000,000	477,004,428	9.71
Primary health care units	338,857,200	120,000,000	218,857,200	4.45
Subtotal	1,655,861,628	960,000,000	695,861,628	14.16
Maternal and child health	89,649,023	60,561,418	29,087,605	0.59
Dengue/malaria	30,100,000	26,700,000	3,400,000	0.07
Protected Diseases	4,803,362,112	2,116,000,000	2,687,362,112	54.68
Tuberculosis	308,149,002	166,149,002	142,000,000	2.89
HIV/AIDS	485,282,585	485,282,585	NA	NA
Expanded Program on Immunization	340,565,291	340,565,291	NA	NA
Subtotal	6,057,108,012	3,195,258,296	2,861,849,716	58.24
Total MPH	7,712,969,640	4,155,258,296	3,557,711,344	72.39
Conversion to USD	USD (DOP 43 × USD 1)		82,737,473	

NA = not applicable

Financial Gap for Other Public Health Sector Institutions

Of the financial gap of DOP 1.357 billion (USD 32 million) associated with other public health sector institutions, the greatest percentage (21% of the national gap) involves the *Farmacias del Pueblo* (DOP 1.031 billion; USD 24 million). For the pharmacy network, the amount programmed was DOP 1.263 billion (USD 29 million), whereas the amount allocated totaled only DOP 233 million (USD 5 million) (table 4).

Table 4. Financial Gap for Other Public Health Sector Institutions

	Programmed for 2014 (SUGEMI)	Allocated for 2014	Financial gap for purchases as programmed	Percentage of national gap
<i>Farmacias del Pueblo</i> (PROMESE)	1,263,933,046	232,965,372	1,030,967,674	20.98
Armed Forces (including Ramón de Lara)	152,477,362	56,031,065	96,446,297	1.96
National Police Force	59,020,055	30,568,942	28,451,113	0.58
Dominican Social Security Institute	500,347,622	378,000,000	122,347,622	2.49
Social Plan of the Office of the President	5,681,424	5,631,528	49,896	0.00
PROMESE Social Programs	78,335,918	0	78,335,918	1.59

	Programmed for 2014 (SUGEMI)	Allocated for 2014	Financial gap for purchases as programmed	Percentage of national gap
Total other public sector institutions	2,059,795,427	703,196,907	1,356,598,520	27.61
Conversion to USD	USD (DOP 43 × USD 1)		31,548,803	

Financial Gap for Joint Purchases and the PCEs

The joint purchasing arrangement mandated by the previously mentioned Presidential Decree includes the MPH's CPNs and CEASs, the *Farmacias del Pueblo*, the Armed Forces, the National Police Force, the Dominican Social Security Institute, PROMESE/CAL Social Programs, and the Social Plan of the Office of the President. The MPH Disease Control Programs (HIV, tuberculosis, family planning, Expanded Program on Immunization, protected diseases) conduct their own independent programming and purchasing exercises.

The amount required to meet the needs of these institutions totaled DOP 3.715 billion, but only DOP 1.663 billion was actually allocated. To close the gap affecting joint purchasing, lobbying efforts conducted by PROMESE/CAL in the first quarter of 2014 led to a Ministry of Finance allocation commitment totaling DOP 1.5 billion (USD 35 million). As of the date of this report (August 2014), this commitment had not yet translated into the transfer to PROMESE/CAL of funds with which to complete the procurement of products required for the final six months of the year (table 5).

Table 5. Financial Gap for Joint Purchases and PCEs, 2014

	Programmed for 2014 (SUGEMI)	Allocated for 2014	Financial gap for purchases as programmed	Percentage of national gap
Joint purchases	3,715,657,055	1,663,196,907	2,052,460,148	41.76
Disease Control Programs	6,057,108,012	3,195,258,296	2,861,849,716	58.24
Total public sector	9,772,765,067	4,858,455,203	4,914,309,864	100.00
Conversion to USD	USD (DOP 43 × USD 1)		114,286,276	

RESULTS OF PROGRAMMING OF PURCHASES FOR THE MPH'S CEAS AND CPN IN 2015

The following sections refer exclusively to the programming of purchases for the MPH's CEASs and CPNs. The estimates for the MPH programs as well as for the rest of the public health sector were still pending review at the time this report was being written. No information is yet available to compare the national financial gap for 2014 and 2015 purchases.

Procurement planning included, for the first time, laboratory reagents and other materials. For this reason, the number of items programmed increased to 1,493. Earmarked for centralized purchasing through PROMESE/CAL were all products procured during the most recent procurement exercise, as well as all products purchased in high volumes (groups A and B based on a Pareto analysis) that would benefit from the economies of scale achieved with a consolidated purchase.

Medicines purchased in small volumes, as typically required by the CEASs, will be procured on a decentralized basis using the resources available to each individual facility. Ultimately, 495 items will be procured by PROMESE/CAL, representing 33% of the items programmed but accounting for 80% of the estimated budget. Health care units will be required to procure on a decentralized basis some 998 items, representing 67% of the items programmed but accounting for only 20% of the estimated budget (figure 1). This distribution will avoid the situation that has occurred in previous years, causing public tenders put out by PROMESE/CAL for the procurement of low-volume items to be declared void because of the lack of providers (figure 1).

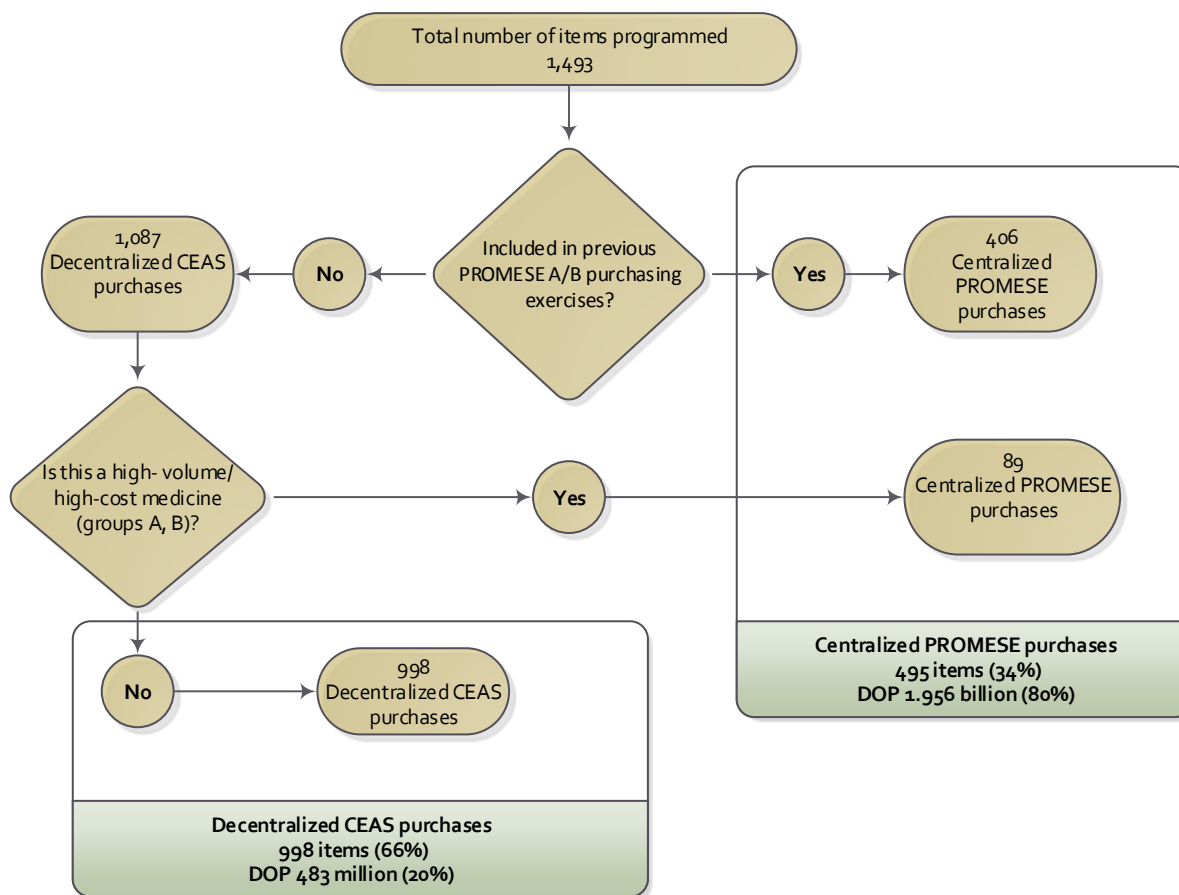


Figure 1. Distribution of products programmed for MPH centralized and decentralized purchasing

The total amount required to purchase all of the medicines, supplies, and laboratory materials that the MPH will require in 2015 is DOP 2.439 billion (USD 56.4 million). According to the programming proposed, PROMESE/CAL, through joint purchases, will need to procure products for DOP 1.956 billion (USD 45 million) to meet the needs of the MPH's CEASs and CPNs. The estimated budget allocation, however, will be no more than approximately DOP 1.012 billion (USD 24 million): DOP 711 million (USD 16.4 million) from the 40% retention for the CEASs budget; DOP 120 million (USD 2.7 million) from amounts allocated for the CPNs through the Regional Health Services (*Servicios Regionales de Salud; SRSs*); and DOP 240 million (USD 5.5 million) from the National Health Insurance (*Seguro Nacional de Salud; SENASA*) and PROMESE/CAL agreement for purchasing medicines for the SRSs. The resulting financial gap for joint purchases would total DOP 944 million (USD 21.8 million). For decentralized purchasing, a total of DOP 483 million (USD 11.1 million) would be required, of which DOP 39 million (USD 896,000) equals the amount that should be financed by SRS billings submitted to SENASA, leaving a gap of DOP 444 million (USD 10.2 million) for decentralized purchases for the CEASs, which should be added to the funds advanced to cover CEAS operating expenses. The total financial gap that will need to be met by the MPH is DOP 1.287 billion (USD 30 million), the sum of the gaps for centralized and decentralized purchases for the CEASs and CPNs (figure 2).

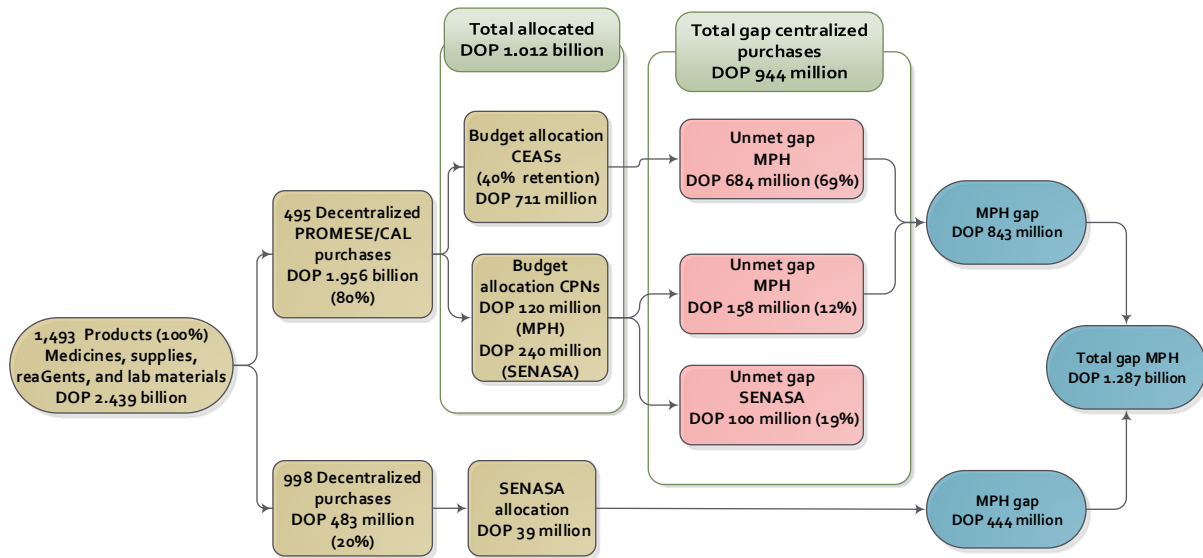


Figure 2. CEAS and CPN programming, budget allocation, and estimated financial gaps for the purchase of medicines and supplies in 2015

ANALYSIS AND DISCUSSION OF RESULTS

The gaps identified in the preceding sections are creating repercussions in terms of medicine provision and availability. A study conducted by SIAPS in 2013⁷ determined that, on average, only 35% of product requirements as submitted by hospitals are actually delivered by PROMESE/CAL. According to the SUGEMI newsletter, 16% of essential medicines were out of stock at the end of December 2013.

Table 6 shows that PROMESE/CAL is not procuring all of the items programmed. The percentage of items not procured in 2014 decreased to 50%, despite the increase in value of items to be procured. This may be the result of the high percentage of products for which competitive bidding proceedings were declared void, following the increase in the number of low-volume medicines and other products that should have been procured through centralized purchasing and the failure to allocate the resources necessary to carry out purchases for 2014.

Table 6. Percentage of Items and Amounts Procured by PROMESE/CAL, 2012 to 2015

Programming year	Items programmed PROMESE	Items procured PROMESE	Percentage	Millions of DOP
2012	660	482	73%	817
2013	478	378	79%	716
2014	808	404	50%	930
2015	703	—	—	—

No country has the capability to finance all of the technology available for disease prevention and treatment.⁸ Countries like the Dominican Republic that seek to achieve universal coverage must make a policy decision about the form in which the inevitable rationing will be expressed:

- a. **Implicit rationing:** Although no limits are declared as to the interventions that will be covered by insurance plans and systems, in practice medicines and supplies are in short supply, and the quality of care is poor.
- b. **Explicit rationing:** Insurance systems establish explicit limits (often negotiated with the beneficiary population) applicable to the interventions to which the insured may have access. This explicit rationing can be expressed by means of positive lists (all procedures identified as available) and negative lists (all procedures identified as not available).

⁷ National Pharmaceuticals Management Unit of the Directorate for Regional Health Service Development and Strengthening. August 2013. *Technical Report: Baseline Study of the Status of the Supply of Medicines and Medical Supplies in Specialized Health Care Centers in the Dominican Republic*. Santo Domingo, Dominican Republic. <http://siapsprogram.org/publication/altview/technical-report-baseline-study-of-the-status-of-the-supply-of-medicines-and-medical-supplies-in-specialized-health-care-centers-in-the-dominican-republic/English/>

⁸ World Health Organization, *The World Health Report: Financing for Universal Coverage*, chap. 2, More money for health, http://www.who.int/whr/2010/10_chap02_en.pdf

Several Latin American countries are opting for explicit rationing as a sounder strategy for providing universal insurance.⁹ The process involves conducting epidemiological studies as well as studies of the cost of interventions that lead to the development of the “packages” of services to be covered, negotiations with interest groups, introduction of protocols for the interventions covered, and a system of rates and billings for collection purposes. This can be considered as a long-term strategy, because of the costs and time required for its complete implementation.

Even in the absence of a completed system of billing by intervention in the Dominican Republic, over the medium term it is feasible to improve billing to SENASA for the medicines and other supplies consumed for each health care service provided.

For its part, the Protected Diseases Program should establish mechanisms for verifying beneficiary affiliation to ensure that the interventions provided are not benefiting patients with private insurance coverage.

Over the short term, however, it will be necessary to implement strategies for closing the financial gap affecting the availability of essential medicines and supplies. Presented below are five strategies that might be considered.

⁹ Ursula Giedion, Ricardo Bitrán, Ignez Tristao, eds. *Planes de beneficios en salud de América Latina*. Banco Interamericano de Desarrollo, División de Protección Social y Salud; 2014.
http://publications.iadb.org/bitstream/handle/11319/6484/Planes_de_beneficios_en_salud_de_America_Latina.pdf?sequence=4

STRATEGIES FOR CLOSING THE GAPS IN THE FINANCING OF MEDICINES AND SUPPLIES IN THE PUBLIC HEALTH SECTOR

Allocate the Total Resources Required for Disease Control Programs

Disease Control Programs have the highest priority because of the high level of cost-effectiveness of their interventions and because the provision of these interventions represents a “public good” (its benefits extend beyond the patient that is the direct object of the intervention provided). The MPH should take steps to ensure the financing of the medicines used by these programs before doing so for any other, less cost-effective intervention. The programming exercises carried out to date take into account the gradual decrease in grant funding currently being provided by cooperation agencies, as a result of which projections call for the increased availability of public resources for the coming years.

Review the Protected Diseases Program’s List of Medicines

Most of the gap in financing for medicines and supplies can be seen in the Protected Diseases Program, which uses high-cost medicines to treat low-incidence diseases. Annual program coverage is estimated at 8,800 patients. In 2015, the 98 medicines proposed for procurement would have a cost of DOP 4.803 billion (USD 106 million).

Given that this program engenders a high degree of political and social sensitivity, it is not strategically desirable to advocate for a reduction or elimination of the services provided to increase coverage by other, more cost-effective clinical interventions. The recommended strategy consists of a review of the list of medicines currently in use and, over the medium term, advocacy in support of the inclusion of these high-cost medicines in social security health plans.

In May 2014, at the request of Protected Diseases Program authorities, SIAPS provided support for the organization of a workshop to review the list of medicines. In the workshop’s preparatory phase, a review was conducted of documentation supporting the therapeutic benefits of these medicines. This review was conducted collaboratively by clinical specialists who, in light of this evidence and in consideration of the program’s budget allocations, reached a consensus to eliminate 45 medicines from program requirements for 2015 (figure 3), to achieve a reduction in cost of approximately DOP 892 million (USD 21 million), compared with 2014.

During the workshop, the remaining medicines were also prioritized by category. If available funding is not sufficient to procure these 53 medicines, a decision will be made to procure those included in category 1 (vital). This would limit the procurement to 32 medicines, thereby reducing the required budget to DOP 2.4 billion (USD 55 million).

In the future, systematic reviews should be conducted before planning purchases, using this same methodology.

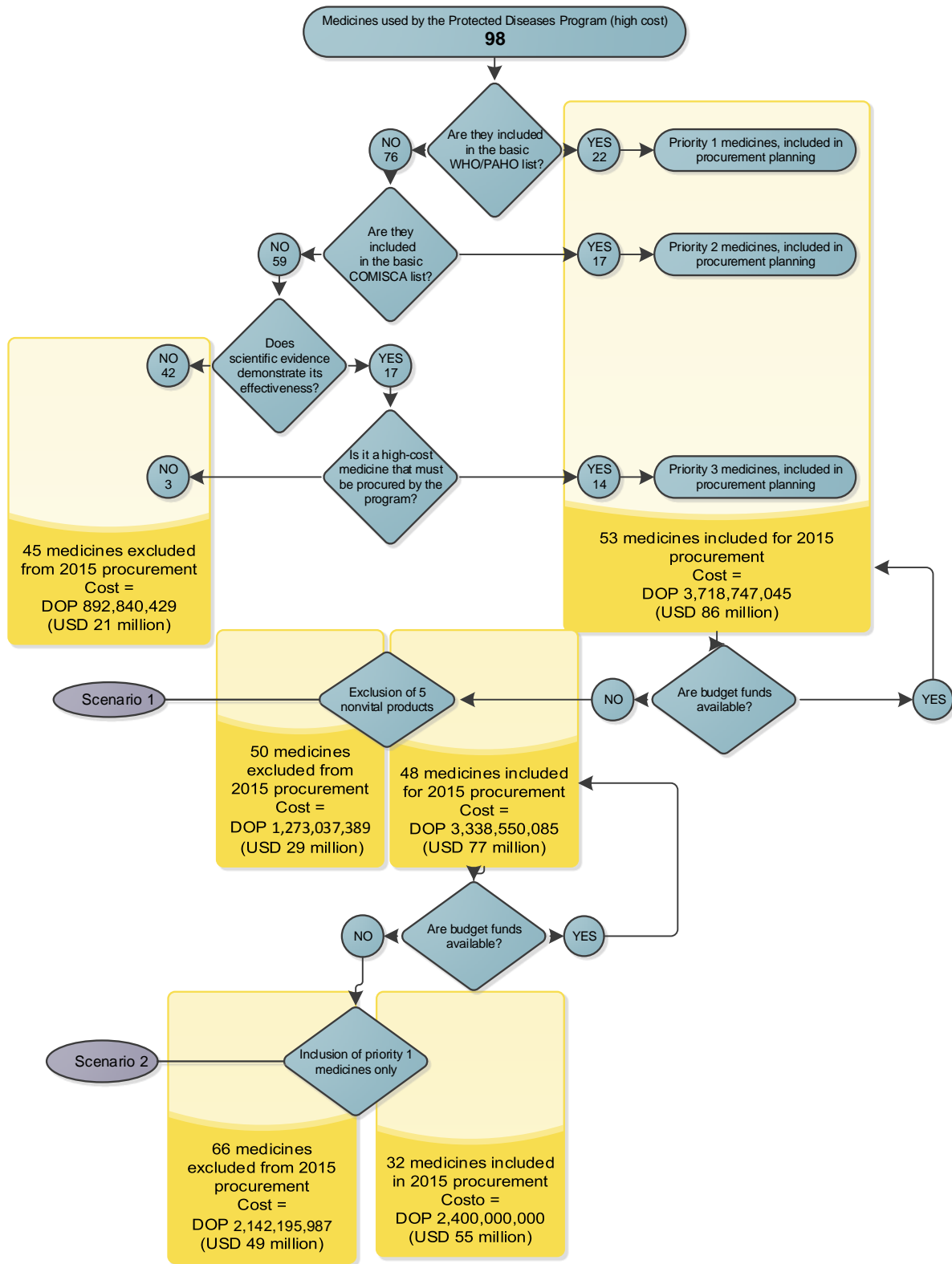


Figure 3. Decision flowchart for reviewing the list of medicines for the Protected Diseases Program

Manage Allocation of More Resources to Cover the Needs Established by the Programming Exercise for Both Centralized and Decentralized Procurement

The feasibility of closing the financial gap identified depends on policy initiatives to be broached by the MPH and other public sector agencies with the Ministry of Finance. In the event that the complete elimination of the gap turns out to be unfeasible, the number of items to be procured will need to be reduced, giving priority to those classified as vital and essential. A proportionate reduction in the number of units to be procured of all medicines and supplies programmed is not recommended.

An increase in the budget to cover the expense to be incurred by hospitals in making decentralized purchases should be prioritized, for the following two reasons:

- In the absence of an increased budget allocation, hospitals will continue to use their regular operating budget to procure medicines.¹⁰
- Given the need to procure the items programmed, purchases will be made on a credit basis, at prices as much as 700% higher than if the same items were procured through PROMESE/CAL.¹¹ Because no budget provisions have been made for this expense, purchases are made to the detriment of the MPH's floating debt.

The programming exercise carried out for 2015 purchases determined that 20% (DOP 483 million) of the total amount programmed should be executed at the decentralized level by the CEASs. To ensure that hospital operations flow smoothly, this amount should not be greater than 10% of the hospital budget, including the payroll for hospital staff.

Revise the List of Medicines and Supplies Included in the Consolidated Procurement of Medicines through PROMESE/CAL

All national guidelines for the purchase of medicines, supplies, and laboratory reagents and other materials should be revised so that programming exercises are carried out to prioritize purchases in the event of problems involving the flow of funds and focus on the most cost-effective products. Annex 1 shows the list of the 50 highest-cost products included in the 2015 purchase programming exercise. Of note are the high degree of dispersal of the total expense (the product with the highest cost accounts for only 3% of the total amount programmed) and the high cost of numerous medical supplies and laboratory materials. Overall, however, medicines make up more than half the cost of all products programmed (figure 4), and it is here that the greatest potential gains can be obtained through interventions that improve rational use.

¹⁰ In a study conducted in 2013, it was determined that, given the shortage of products that should be provided by PROMESE/CAL, hospitals spent 55% of their budget on the purchase of medicines and supplies and, consequently, only the remaining 45% on hospital operating expenses.

¹¹ National Pharmaceuticals Management Unit of the Directorate for Regional Health Service Development and Strengthening. August 2013. *Technical Report: Baseline Study of the Status of the Supply of Medicines and Medical Supplies in Specialized Health Care Centers in the Dominican Republic*. Santo Domingo, Dominican Republic. <http://siapsprogram.org/publication/technical-report-baseline-study-of-the-status-of-the-supply-of-medicines-and-medical-supplies-in-specialized-health-care-centers-in-the-dominican-republic/>

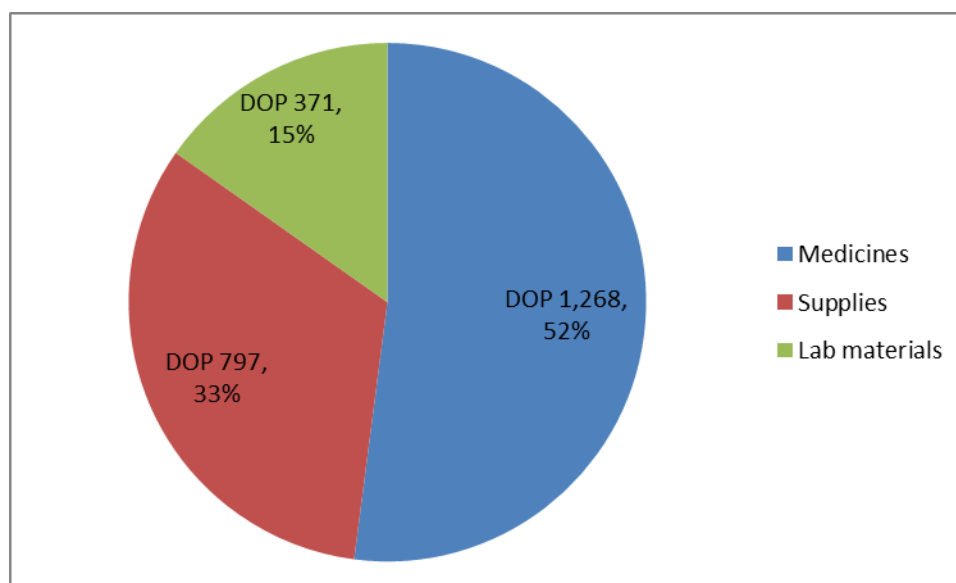


Figure 4. Programming of products by category for purchases in 2015

The recommended process for reviewing lists and catalogs involves the following:

- **Revise and implement the national list of medicines:** This list has not been updated since 2005. For it to become a useful public policy instrument, it should be prepared and published using the following guidelines:
 - Make it as close as possible to the number of products included on the World Health Organization's prototype list. An extensive national list fails to meet the objective of serving as an instrument to ensure that public expenditures are made more rationally.
 - Include criteria for prioritization (vital, essential, and nonessential categories, *VEN*).
 - Include the levels of care at which the products should be used.
 - Back it by a Ministerial Decree mandating its obligatory use in the case of public sector purchases.
- **Revise catalogs of medical supplies and laboratory materials and reagents:** These have only recently been prepared, as a result of which they still contain errors and duplications. Over the medium term, consideration should also be given to the preparation of more restricted national lists designed to optimize the use of public resources.

Incorporate Additional Purchasing Mechanisms besides Those Available through PROMESE/CAL

As mandated by Decree 608-13, PROMESE/CAL is responsible for all national public sector purchases of medicines and medical supplies. Toward this end, additional procurement mechanisms need to be added to those currently being offered:

- **Purchases made through cooperating agencies:** This is a mechanism used regularly by PCEs in the procurement of, among other things, vaccines, antiretrovirals, and medicines for treating tuberculosis, through cooperating organizations such as the Pan American Health Organization's Rotating Fund, the Global Drug Facility, and the United Nations Population Fund.
- **Purchases based on international public tenders:** Use of this mechanism can be explored for items included in national public tenders that have been declared void.
- **Centralized price negotiation for decentralized purchases:** Based on the requirements established in the programming exercises, this method of purchasing would make it possible to establish prices and providers for decentralized purchases. Hospitals and SRSs would procure products at predetermined prices by virtue of bilateral commercial relationships set up exclusively with selected providers. A feasibility study regarding the implementation of this purchasing mechanism was carried out in 2012.¹²

¹² Noguera, Mónica. 2012. *Propuesta de licitación pública de precios para la compra descentralizada en el Ministerio de Salud Pública de República Dominicana*. Presented to the United States Agency for International Development by the Strengthening Pharmaceutical Systems (SPS) Program. Arlington, VA: Management Sciences for Health.

Annex 1. PRODUCTS PROGRAMMED FOR 2015 PURCHASES HAVING THE HIGHEST COST BY VOLUME

Description: Name, strength, dosage form, unit packaging	Joint + decentralized purchases 2015	Cost of joint purchases 2015	%	Cumulative %
Gauze 36 x 100; yards; roll 20 x 12; unit	112,279	52,465,544	3	3
Ringer's Lactate; injectable; bottled solution x 1 L; unit	1,188,079	40,751,093	2	5
Exam gloves, medium (M); unit; box x 100 units; box of 100; unit	304,827	36,548,697	2	7
Sodium chloride; 0.009; injectable; bottled solution x 1 L; unit	1,212,780	34,891,683	2	9
Human albumin; 0.2; injectable; vial x 50 mL; unit	23,699	32,187,372	2	11
Radio-opaque IV catheter 22 g; unit; unit	1,322,210	30,212,505	2	12
Radio-opaque IV catheter 20 g; unit; unit	1,189,675	27,184,062	1	14
Tetanus immune globulin; 250 IU; injectable; vial; unit	40,483	23,987,046	1	15
Dextrose + sodium chloride; 5% + 0.33%; injectable; bottled solution x 1 L; unit	687,715	23,540,478	1	16
Radio-opaque IV catheter 24 g; unit; unit	1,029,416	23,522,162	1	18
Hydrocortisone sodium succinate; 100 mg/mL; injectable; vial; unit	1,048,690	22,494,403	1	19
Sevoflurane; 1; solution; bottle x 250 mL; unit	4,457	22,060,170	1	20
Alveolar surfactant agent; 25 mg/mL; injectable; vial x 8 mL; unit	3,990	21,929,085	1	21
Phenytoin sodium; 250 mg; injectable; vial; unit	150,906	20,749,548	1	22
Chromium catgut 1 heavy tapered needle 1/2 circle Ct-1, 70 cm; unit; unit	233,401	18,921,835	1	24
Sysmex KX 21-n	17,805,106	17,805,106	1	24
Polyglactin sutures 1 heavy tapered needle 1/2 ct-1, 75 cm; unit; unit	161,886	17,781,503	1	25
Dextrose + sodium chloride; 5% + 0.9%; injectable; bottle of solution x 1 L; unit	512,576	17,509,610	1	26
Exam gloves, large (L); unit; box x 100 units; box 100 unit	143,731	17,233,323	1	27
Feed tube for infusion pump; unit; unit	96,314	16,001,575	1	28
Nylon 2-0 curved cutting needle 3/8 circle SC, 45 cm; unit; unit	310,471	15,899,199	1	29

Programming the purchase of medicines and supplies in the Dominican Republic's public health system

Description: Name, strength, dosage form, unit packaging	Joint + decentralized purchases 2015	Cost of joint purchases 2015	%	Cumulative %
Syringe 5 mL 21 x 1 1/2"; unit; box x 100 units; unit	11,647,776	14,792,675	1	30
Surgical glove No. 7 1/2; unit; pair; pair	2,237,922	14,747,908	1	31
Chromium catgut 0 heavy tapered needle 1/2 circle Ct-1, 70 cm; unit; unit	193,120	14,507,189	1	31
X-ray plate 14 x 17; unit; box x 100 units; box 100 unit	4,194	14,250,793	1	32
Syringe 10 mL 21 x 1 1/2"; unit; box x 100 units; unit	7,550,072	13,741,131	1	33
Radio-opaque IV catheter 18g; unit; unit	557,245	12,727,485	1	34
Syringe 3 mL 21 x 1 1/2"; unit; box x 100 units; unit	10,027,044	12,132,724	1	34
Vacutainer tubes, 5 mL, lavender cap, boxes of 100 tubes; box	23,281	11,640,500	1	35
Polyglactin sutures 0 heavy tapered needle 1/2 ct-1, 75 cm; unit; unit	115,228	11,585,063	1	36
Nylon 4-0 curved cutting needle 3/8 circle SC, 45 cm; unit; unit	219,459	10,926,874	1	36
X-ray plate 14 x 14; unit; box x 100 units; box 100 unit	3,889	10,888,375	1	37
Blood gas cartridge, for pH, PCO2, PO2, Na, K, HCT, Ca; unit; unit	30,188	10,559,657	1	37
Citicoline; 500 mg; injectable; vial; unit	97,169	10,528,218	1	38
Nylon 3-0 curved cutting needle 3/8 circle SC, 45 cm; unit; unit	222,944	10,371,332	1	38
Dextrose; 0.05; injectable; bottled solution x 1 L; unit	300,157	10,274,374	1	39
Ceftriaxone; 1g; injectable; vial; unit	1,056,918	10,252,108	1	40
IV feeding tube; unit; unit	1,803,363	9,900,460	1	40
Isopropyl alcohol; 0.7; solution; gallon; gallon	32,308	9,559,967	1	41
Albuterol; 90 mcg; nebulization solution; bottle x 10 mL; unit	55,136	9,097,457	0	41
Enoxaparin; 40 mg; injectable; preloaded syringe x 0.4 mL; unit	74,225	9,062,873	0	42
Surgical glove No. 8; unit; pair; pair	1,361,668	8,973,391	0	42
Vacutainer tubes, 5 mL, red cap; boxes of 100 tubes; box	12,774	8,941,800	0	43
Lactated Ringer's/dextrose; 0.05; injectable; bottled solution x 1 L; unit	254,251	8,703,025	0	43
Chromium catgut 2-0 heavy tapered needle 1/2 circle Ct-1, 70 cm; unit; unit	116,795	8,572,738	0	43
X-ray plate 10 x 12; unit; box x 100 units; box 100 unit	4,870	8,559,783	0	44

Anexo I

Description: Name, strength, dosage form, unit packaging	Joint + decentralized purchases 2015	Cost of joint purchases 2015	%	Cumulative %
Absorbent cotton, roll x 1 lb; unit; unit	112,994	8,463,221	0	44
Chromium catgut 3-0 heavy tapered needle 1/2 circle, 70 cm; unit; unit	114,393	8,396,476	0	45
Ergonovine; 0.2 mg/mL; injectable; ampoule x 1 mL; unit	278,835	8,281,388	0	45
Urine/stool sample container (nonsterile), container; unit	484,650	8,239,050	0	46
Polyglactin sutures 2-0 heavy tapered needle 1/2 sh, 75 cm; unit; unit	74,397	8,171,799	0	46
Imipenem; 1 g; injectable; vial	22,145	7,984,864	0	47
