Procurement Planning for Medicines and Supplies in the Public Health System of the Dominican Republic

September 2015

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SIAPS
Systems for Improved Access to Pharmaceuticals and Services

MINISTERIO DE SALUD PÚBLICA

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The Systems for Improved Access to Pharmaceuticals and Services Program (SIAPS) has the objective of guarantying the availability of quality medicines and effective pharmaceutical services to attain desired health outcomes. To this end, the SIAPS program's areas of focus include improving governance, developing the capacity of pharmaceutical management and related services, prioritizing the information necessary to fuel the decision-making process in the pharmaceutical sector, fortifying strategies and mechanisms for funding that will improve access to medicines, and increasing the quality of pharmaceutical services.

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ACRONYMS AND ABBREVIATIONS

CBME	Cuadro básico de medicamentos esenciales
CEAS	centros especializados de atención en salud (specialized health care center)
CPN	centro de primer nivel de atención (primary health care center)
DCP	disease control program
DOP	Dominican peso
EPI	Expanded Programme on Immunization
MSP	Ministerio de Salud Pública (Ministry of Public Health)
PMAC	Programa de Medicamentos de Alto Costo (High-Cost Medicines Program)
PROMESE/CAL	Programa de Medicamentos Esenciales y Central de Abastecimiento Logístico (Essential Medicines Program and Center for Logistical Supplies)
SENASA	Seguro Nacional de Salud (National Health Insurance)
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SNS	Servicio Nacional de Salud (National Health Service)
SRS	Servicio Regional de Salud (Regional Health Service)
SUGEMI	Sistema Único de Gestión de Medicamentos e Insumos (Integrated System for Medicine and Supply Management)
UNGM	Unidad Nacional de Gestión de Medicamentos (National Pharmaceutical Management Unit)
USD	US dollar

BACKGROUND

Until 2010, the estimates and planning for the purchase of medicines and supplies in the public sector of the Dominican Republic were carried out in each individual health establishment without a standardized methodology. Within the framework of implementing the Integrated System for Medicine and Supply Management (Sistema Único de Gestión de Medicamentos e Insumos, or SUGEMI), the National Medicine and Supply Management Unit (Unidad Nacional de Gestión de Medicamentos e Insumos, or UNGM) of the National Health Service (Servicio Nacional de Salud, or SNS), with the support of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, began using a standardized methodology for national planning exercises for purchasing in 2011. These exercises necessitated first development of a manual for estimation and planning of purchases (*Manual de Estimación y Programación para la Compra*) and subsequently catalogs of medicines, medical-surgical supplies, and laboratory reagents and equipment.

The planning exercises carried out to date have consisted of four steps:

1. **Preparation**: Distribution of forms and electronic matrices to health care units to collect, organize, and review information on procurement prices, historic consumption (over the past three years), current stocks, and purchase orders already in process. During this step, specialists from the UNGM resolve any issues with the electronic matrices to standardize the criteria for their completion.

2. **Planning exercises**: Until 2014 three-day meetings were held annually with teams responsible for the management of medicine and supply stocks and laboratory supplies in health care units. After a brief methodological orientation, the work teams estimated the purchase requirements for the following year. In 2015 the planning exercise was carried out in a decentralized form within the health care units and Regional Health Services (Servicios Regional de Salud, or SRS), with support from specialists from the UNGM, the Essential Medicines Program and Center for Logistical Supplies (Programa de Medicamentos Esenciales y Central de Abastecimiento Logístico, or PROMESE/CAL), and SIAPS.

3. **Review and consolidation of the planning matrices**: Before consolidation, each of the planning matrices is reviewed to ensure they were completed using the same criteria and contain no calculation errors. In 2015 a national workshop was carried out to consolidate and review the information gathered from health care units.

4. **Presentation of results to decision makers, production of reports, and submission to authorities**: The preliminary planning results are presented to and discussed with decision makers to be adjusted and validated. The reports are then submitted to the appropriate authorities to include the planned amounts in the Ministry of Public Health (Ministerio de Salud Pública, or MSP) budget for the next fiscal year.

The planning exercises progressively incorporated a greater number of health care units and disease control programs (DCPs). Since 2013, in response to Presidential Decree 608-12, which ordered the joint procurement of medicines and supplies for the public sector, the

planning exercise has incorporated five institutions[1] in addition to the MSP. Table 1 shows a timeline of planning exercises to date.

Table 1. Planning Exercises for the Procurement of Medicines and Supplies

Planning year	Participating institutions	Total Items planned	Planned amount (DOP, millions)	Items for PROMESE purchase	DOP, millions	Items for decentralized purchase	DOP, millions
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[a]	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%)
2016	118	1,762	2,517	678 (38%)	2,094 (80%)	1,123 (62%)	522 (20%)

a. Laboratory reagents and equipment were included in planning.

The analysis that followed these planning exercises allowed the identification of gaps in procurement funding, which are presented in the following section.

[1] These institutions are People's Pharmacies, the Armed Forces, the National Police, the Dominican Social Security Institute, PROMESE/CAL social programs, and the Presidential Social Plan.

IDENTIFICATION AND CLOSING OF FINANCIAL GAPS IN FUNDING FOR MEDICINES AND SUPPLIES

Gap in Funding of Medicines and Supplies in the Public Health System in 2015

The amount of funding needed to cover the medicines and supplies planned for purchase in 2015 for all of the public health sector rose to DOP 7.238 billion (USD 161 million). In the state revenue and expenditures budget a total of DOP 4.878 billion (USD 108 million) was allocated; consequently, the financial gap rose to DOP 2.360 billion (USD 52 million) (table 2).

Of this financial gap, 95% (DOP 2.249 billion; USD 50 million) is associated with MSP programs, primarily the High-Cost Medicines Program (Programa de Medicamentos de Alto Costo, or PMAC), specialized health care centers (*centros especializados de atención*, or CEASs), and primary health care centers (*centros del primer nivel*, or CPNs). The remaining 5% (DOP 111 million; USD 2 million) is associated with other institutions in the public sector, primarily the People's Pharmacies (Farmacias del Pueblo) and the Armed Forces (table 2).

Table 2. Financial Gap for the Purchase of Medicines and Supplies in the Public Health Sector, 2015

	Planned for 2015 (SUGEMI)	Allocated for 2015	Financial gap for purchases as planned	Percentage
MSP	5,522,334,600	3,273,547,498	2,248,787,102	95
Other public sector institutions	1,715,748,240	1,604,900,121	110,848,119	5
Public sector total	7,238,082,840	4,878,447,619	2,359,635,221	100
USD conversion		USD (DOP 45 × USD 1)	52,436,338	

MSP Financial Gap

Of the financial gap associated with the MSP (DOP 2.249 billion; USD 50 million), 44% is concentrated in CEASs (DOP 1.038 billion; USD 23 million) and 8% in CPNs (DOP 191 million; USD 4 million); together they constitute 52% of the national gap in the public health sector. Another 21% belongs to the PMAC (DOP 506 million; USD 11 million) and 21% to the Expanded Programme on Immunization (EPI) (DOP 486 million; USD 11 million) (table 3).

Table 3. Financial Gap for MSP Purchase of Medicines and Supplies, 2015

	Planned for 2015 (SUGEMI)	Allocated for 2015	Financial gap for purchases as planned	Percentage of national gap	Percentage of MSP gap
Hospitals	1,749,296,449	711,225,600	1,038,070,849	44	46
Primary health care units	311,206,075	120,000,000	191,206,075	8	9
Subtotal	2,060,502,523	831,225,600	1,229,276,923	52	55
Maternal and child care	78,063,314	81,863,314	(3,800,000)	(0)	(0)
Dengue/malaria	30,100,000	—	30,100,000	1	1
PMAC	1,993,042,835	1,486,693,976	506,348,859	21	23
Tuberculosis	69,000,000	67,900,000	1,100,000	0	0
HIV/AIDS	382,183,183	382,183,183	—	—	—
EPI	909,442,745	423,681,425	485,761,320	21	22
Subtotal	3,461,832,077	2,442,321,898	1,019,510,179	43	45
MSP total	5,522,334,600	3,273,547,498	2,248,787,102	95	100
USD conversion			USD (DOP 45 × USD 1)	49,973,046	

Financial Gap of Other Public Sector Institutions

The financial gap associated with other public sector health institutions rose to DOP 111 million (USD 2 million), assuming that the amounts above the programmed figures that were allocated to the Dominican Social Security Institute (Instituto Dominicano de Seguridad Social) (a surplus of DOP 101 million; USD 2 million) and PROMESE/CAL social programs (DOP 15 million; USD 333,000) were distributed among the remaining institutions with budget deficits (table 4).

Table 4. Financial Gap for Other Public Health Sector Institutions, 2015

	Planned for 2015 (SUGEMI)	Allocated for 2015	Financial gap for purchases as planned	Percentage of national gap
People's Pharmacies (PROMESE)	1,240,359,910	1,072,965,367	167,394,543	7.1
Armed Forces (including Ramón de Lara)	95,169,731	56,031,065	39,138,666	1.7
National Police	47,944,059	30,568,943	17,375,116	0.7
Dominican Social Security Institute	276,844,057	378,000,000	(101,155,943)	−4.3
Presidential Social Plan	9,163,987	5,631,528	3,532,459	0.1
PROMESE social programs	46,266,496	61,703,218	(15,436,722)	−0.7
Total from other public sector institutions	1,715,748,240	1,604,900,121	110,848,119	4.7
USD conversion		USD (DOP 45 × USD 1)	2,463,291	

Financial Gap for Joint Procurement and Disease Control Programs

The joint purchase established in the referenced Presidential Decree includes the CPNs and CEASs of the SNS, People's Pharmacies, Armed Forces, National Police, Dominican Social Security Institute, PROMESE/CAL social programs, and Presidential Social Plan. The MSP DCPs (HIV, tuberculosis, family planning, EPI, protected diseases) carry out independent planning and purchase exercises.

The amount needed to cover the requirements of these institutions rose to DOP 3.776 billion (USD 84 million), and only DOP 2.436 billion (USD 54 million) was allocated, leaving a gap of DOP 1.340 billion (USD 30 million). The financial gap for DCPs was DOP 1.020 billion (USD 22 million), equivalent to 43% of the national gap (table 5).

Table 5. Financial Gap for Joint Purchase and DCPs, 2015

	Planned for 2015 (SUGEMI)	Allocated for 2015	Financial gap for purchases as planned	Percentage of national gap
Joint purchase	3,776,250,763	2,436,125,721	1,340,125,042	57
DCPs	3,461,832,077	2,442,321,898	1,019,510,179	43
Public sector total	7,238,082,840	4,878,447,619	2,359,635,221	100
USD conversion			USD (DOP 45 × USD 1)	52,436,338

COMPARATIVE ANALYSIS OF THE MSP FINANCIAL GAP EXERCISES FOR PROCUREMENT IN 2014 AND 2015

The budget allocation covering medicines and supplies needed by the MSP has been insufficient since at least 2011 when the UNGM began to record these data. The gap increased in 2014 to DOP 3.296 billion (USD 77 million) as a result of planning for a greater number of items and an increase in programmed value of high-cost medicines. In 2015 this gap was reduced by more than 30% to DOP 2.248 billion (USD 50 million) (figure 1). This can be attributed to more precise planning, the availability of reserve stocks in health care facilities, and in particular, a reduction in the amount planned for the purchase of high-cost medicines. The planned amounts for this group of medicines went from DOP 4.803 billion (USD 112 million) in 2014 to DOP 1.993 billion (USD 44 million) in 2015 (a reduction of close to 60%).

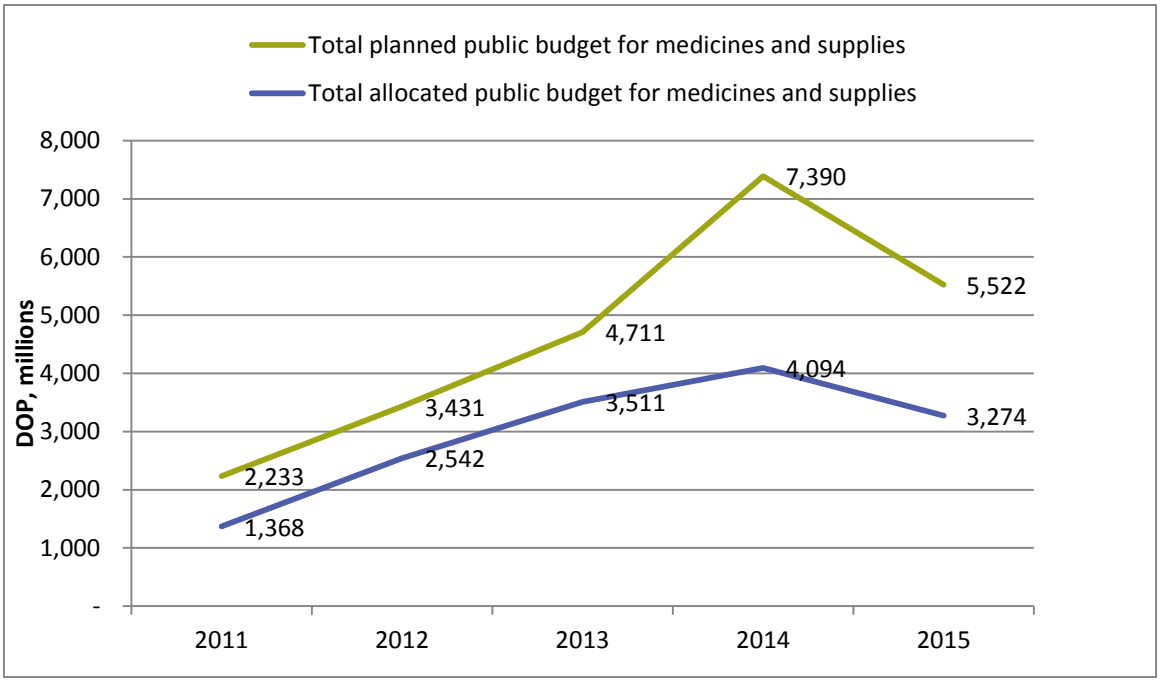

Figure 1. Financial gaps for the procurement of MSP medicines and supplies, 2011–2015

Table 6 shows that the financial gap of the public health sector had been reduced in 2015 at the expense of a significant decrease in the planned amounts for the acquisition of high-cost medicines and not because of higher budget allocation. In fact, the allocation in 2015 is DOP 820 million (USD 18 million) less than in 2014.

Table 6. Financial Gaps for All Public Sector Health Institutions, 2014–2015 (DOP)

Institutions	2014			2015		
	Planned	Allocated	Gap	Planned	Allocated	Gap
MSP (Hospitals + UNAPS)	1,781,066,580	960,000,000	821,066,580	2,060,502,523	831,225,600	1,229,276,923
DCPs (HIV, TB, FP, EPI, PMAC)	5,608,934,002	3,134,376,325	2,474,557,677	3,461,832,077	2,442,321,898	1,019,510,179
People's Pharmacies (PROMESE)	1,263,933,046	232,965,372	1,030,967,674	1,240,359,910	1,072,965,367	167,394,543
Armed Forces (including Ramón de Lara)	152,477,362	56,031,065	96,446,297	95,169,731	56,031,065	39,138,666
National Police	59,020,055	30,568,942	28,451,113	47,944,059	30,568,943	17,375,116
Dominican Social Security Institute	500,347,622	378,000,000	122,347,622	276,844,057	378,000,000	(101,155,943)
PROMESE social programs	78,335,918	-	78,335,918	46,266,496	61,703,218	(15,436,722)
Presidential Social Plan	5,681,424	5,631,528	49,896	9,163,987	5,631,528	3,532,459
Total	9,898,923,814	5,104,701,038	**4,794,222,777**	7,238,082,840	4,878,447,619	**2,359,635,221**

Note: FP = Family Planning, TB = Tuberculosis, UNAPS = national primary health care units.

RESULTS OF MSP PROCUREMENT PLANNING FOR 2016

The number of planned items was 1,762. All of the products acquired in the most recent procurement exercise and all of the products to be purchased in high volume (groups A and B in a Pareto analysis) were earmarked for centralized procurement through PROMESE/CAL, because they would benefit from the savings obtained through consolidated purchasing; meanwhile, medicines purchased in low volume, which are typically required by CEASs, will be acquired in a decentralized form with each institution's own resources.

A total of 677 items will be acquired through PROMESE/CAL, which equates to 38% of the planned items and 80% of the estimated budget. The health care units (CEASs/SRSs) will need to acquire 1,085 items in a decentralized form, which equates to 62% of the planned items but only 20% of the estimated budget (figure 2). This distribution will avoid the tendering process carried out by PROMESE/CAL for low-volume products not being awarded because of a lack of suppliers.

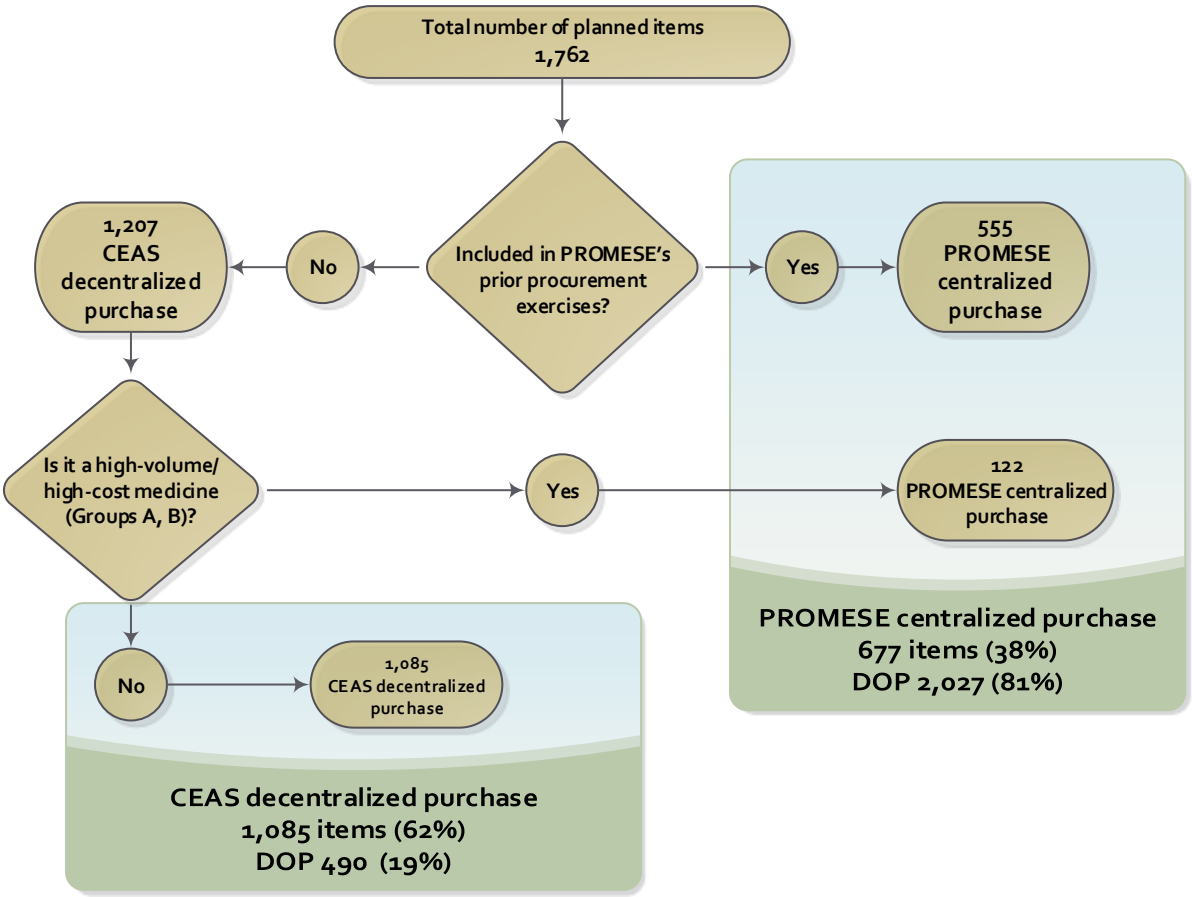

Figure 2. Distribution of MSP products planned for centralized and decentralized procurement

The total amount needed for the procurement of all of the medicines, supplies, and laboratory materials that will be required by the MSP in 2016 rose to DOP 2.517 billion (USD 56 million). According to the proposed planning, PROMESE/CAL should acquire products through joint procurement for DOP 2.027 billion (USD 45 million) to cover the needs of the MSP CEASs and CPNs and National Health Insurance (Segro Nacional de Salud, or SENASA). If the budget allocation for 2016 were equal to that of 2015,[2] the budget gap would be approximately DOP 717 million (USD 16 million) at the expense of the MSP, since the funds allocated to SENASA cover its total needs for 2016.

For the decentralized procurement, DOP 490 million (USD 11 million) will be needed, of which DOP 8 million (USD 177,000) corresponds to the amount that must be financed by SRSs billing SENASA, leaving a gap of DOP 482 million (USD 11 million) for the decentralized procurement of the CEASs and CPNs, which must be added to the funding advance allocated for their operating costs.

The total financial gap for the procurement of medicines and supplies for the CEASs and CPNs will rise to DOP 1.208 billion (USD 27 million), resulting from the sum of the gap for the centralized and decentralized procurements of the CEASs and CPNs (figure 3).

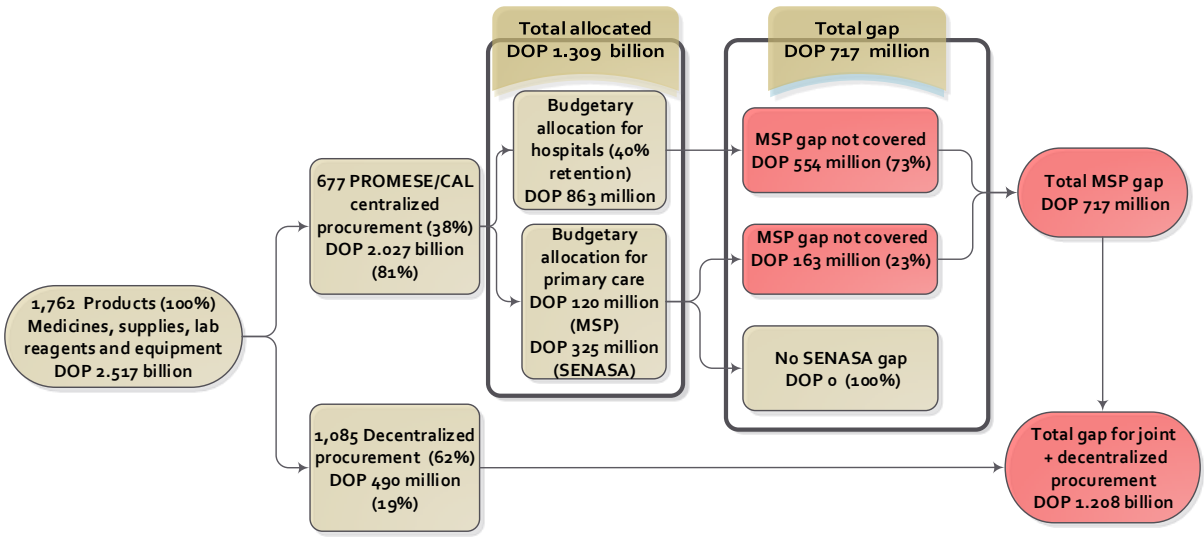

Figure 3. Planning, budget allocation, and estimated financial gaps of CEASs and CPNs for the procurement of medicines and supplies in 2016

[2] DOP 863 million for CEASs, DOP 120 million for CPNs through the MSP, and DOP 325 million for CPNs through SENASA, for a total of DOP 1.309 billion (USD 29 million).

RECOMMENDATIONS FOR IMPROVING ACCESS TO MEDICINES AND SUPPLIES IN THE PUBLIC HEALTH SECTOR

Budget Planning for 2016 and 2017: According to the latest bulletin from SUGEMI (March 2015), stock-outs of medicines for general use in health centers were at 4%; regardless, 44% of health centers were found with less than the recommended stock (one month's supply). The risk of widespread stock-outs in 2016 is high if the state revenue and expenditures budget does not include the needed amounts for acquiring planned quantities. The following interventions must be considered to avoid major stock-outs:

- **Planned amounts should be included in the proposed state revenue and expenditures budget**: The planning exercise conducted in June 2015 used a sound methodology that rationalizes expenses. The MSP, therefore, must carry out the political legwork to make sure that the planned sums are included in the state revenue and expenditures budget.

- **The MSP Finance Department and subsequently the National Health Service must open budget lines to monitor the allocation and execution to each SRS/CEAS**: The Ministry of Finance transfers 40% of the allocated budget for CEASs to PROMESE/CAL for medicine procurement. The SNS must open individual line items for each unit of expenditure (SRS/CEAS) to verify that the withheld amount corresponds to the value of the products delivered through PROMESE/CAL.

- **All of the programmed medicines must be included in the essential medicines list (Cuadro Básico de Medicamentos Esenciales, or CBME)**: The purchase programming of medicines for 2016 used as a reference the CBME approved by Ministerial Agreement #000023 in August 2015. The adherence to the CBME ensures the optimization of financial resources allocated for the procurement of medicines. In the future, all plans for procurement of medicines in the public services network must use the current CBME as a reference.

- **All of the planned medical-surgical supplies and laboratory equipment/reagents must be in the SUGEMI catalogs**: There is no list of essential products for medical-surgical supplies and laboratory materials and reagents equivalent to that of essential medicines. While this is being developed, planning and procurement must use the SUGEMI catalogs as a reference.

- **Procurement and distribution in 2015/2016**: The availability of essential products in health care facilities appears to be affected by purchases that do not correspond with planning, periodic requisitions that do not correspond to what was planned, and shipments that do not correspond with what was requested. The following interventions must be considered to avoid major stock-outs: the services of acquisition, storage, and distribution through PROMESE/CAL must be subject to a contract with the MSP and the Directorate of the SNS. Its terms may include the following:

    - **The PROMESE/CAL Council will present and validate the distribution of the budget allocation provided by the Ministry of Finance for joint procurement**: The Ministry of Finance transfers the global budget allocation for the joint

procurement to PROMESE/CAL. The decision on individual allocations per *client* (SNS, Police, etc.) must be discussed and validated within the PROMESE/CAL Council, which is presided over by the MSP.

- **PROMESE/CAL will inform the SNS about purchases that are carried out (including quantities, prices, and items that have not been fulfilled)**: PROMESE/CAL will inform the SNS and other *clients* of the items, quantities, and price of purchases that are carried out. This will allow the MSP to communicate ahead of time with the decentralized entities (SRSs and CEASs) about the products they will receive from PROMESE/CAL and those that must be acquired by decentralized purchase.

- **The SRSs/CEASs will periodically request products from PROMESE/CAL with variations no greater than +/− 10% from the planned amounts**: The requests carried out by the SRSs/CEASs must be adjusted to variations no greater than 10% from the quantities included in annual procurement planning. The SRSs/CEASs will be able to reject products and quantities that exceed these margins; by the same token, their warehouses must receive the products and quantities committed in annual planning.

- **PROMESE/CAL will periodically inform the MSP about the requisitions and shipments for each SRS/CEAS, the cumulative value of delivered shipments, and the remainder to be disbursed**: PROMESE/CAL will periodically inform the SNS and other clients on the shipments made to each SRS/CEAS, including items, quantities, and values. The SRS/CEAS will determine the correlation between the retained amounts and the value of the shipments to adjust immediate requisitions and the budget in the midterm.

ANNEX 1. HIGHEST-COST PRODUCTS BY PLANNED VOLUME FOR PROCUREMENT IN 2016

Products	2016 Needs	Assessed Value of 2016 Needs	%	Cumulative %	Pareto
FENITOINA SODICA;30 mg/ml;LIQUIDO ORAL;FRASCO	148,530.60	62,241,747.93	**3.1%**	3.1%	**A**
GASA 36 X 100,TRAMA (20X12);;;ROLLO O ALMOHADA	117,596.60	58,055,089.49	**2.9%**	6.1%	**A**
GUANTE EXAMEN MEDIUM (M);;;CAJA x 100 Unidades	379,206.40	56,293,190.08	**2.8%**	8.9%	**A**
CLORURO SODICO;0.009;INYECTABLE;FRASCO SOLUCIÓN x 1 L	1,370,848.60	48,500,623.47	**2.4%**	11.4%	**A**
LACTATO DE RINGER (HARTMANN);1000 ml;INYECTABLE;FRASCO SOLUCIÓN x 1000 ml	1,140,079.10	44,474,485.69	**2.2%**	13.6%	**A**
INMUNOGLOBULINA HUMANA;250 UI;INYECTABLE;VIAL	60,221.20	38,587,938.32	**1.9%**	15.6%	**A**
HIDROCORTISONA SUCINATO SODICO;100 mg/mL;INYECTABLE;VIAL	1,628,243.60	27,973,225.05	**1.4%**	17.0%	**A**
DEXTROSA + CLORURO SODICO;5% + 0.33%;INYECTABLE;FRASCO SOLUCIÓN x 1 L	722,273.40	27,930,312.38	**1.4%**	18.4%	**A**
SEVOFLUORANO;1;SOLUCIÓN;FRASCO x 250 ml	5,033.80	27,409,041.00	**1.4%**	19.8%	**A**
—YODOPOVIDONA (POVIDONA YODADA);0.1;SOLUCIÓN 10%;GALÓN	24,344.80	22,092,906.00	**1.1%**	20.9%	**A**
ALBUMINA HUMANA;0.2;INYECTABLE;VIAL 50 ml	11,950.00	21,544,655.00	**1.1%**	22.0%	**A**
BATA DESECHABLE EXAMEN PACIENTE;;;PAQUETE x 10 Unidades NO ESTERIL	67,442.60	21,449,444.50	**1.1%**	23.0%	**A**
DEXTROSA + CLORURO SODICO;5% + 0.9%;INYECTABLE;FRASCO SOLUCIÓN x 1 L	515,290.00	19,926,264.30	**1.0%**	24.1%	**A**
AMOXICILINA;250 mg/5ml;SUSPENSIÓN ORAL;FRASCO x 120 ml	791,946.90	19,648,202.59	**1.0%**	25.0%	**A**
ESPARADRAPO BASE SEDA (Z-O)1X10,2X10,3X10;;;CAJA x 6 Unidades (Rollo)	68,248.00	19,508,690.80	**1.0%**	26.0%	**A**
JERINGA 5 ML 21 X 1 1/2";;;SOBRE PLASTICO ESTERIL EN CAJAS DE 100 UNIDADES	11,829,379.90	19,400,183.04	**1.0%**	27.0%	**A**
GUANTE EXAMEN LARGE (L);;;CAJA x 100 Unidades	129,938.90	19,289,429.71	**1.0%**	28.0%	**A**
INSULINA MIXTA 70 / 30 HUMANA;100 UI/ml;INYECTABLE;VIAL x 10 ml	142,652.00	18,948,465.16	**1.0%**	28.9%	**A**
CATETER VENOSO PERIFERICO (CORTO) 22g;;;EMPAQUE ESTERIL INDIVIDUAL EN CAJA DE 50 UNIDADES	939,191.80	18,520,862.30	**0.9%**	29.9%	**A**
JERINGA 10 ML 21 X 1 1/2";;;SOBRE PLASTICO ESTERIL EN CAJAS DE 100 UNIDADES	7,686,500.30	18,217,005.71	**0.9%**	30.8%	**A**
INSULINA INTERMEDIA NPH;100 UI/ml;INYECTABLE;VIAL x 10 ml	136,576.80	18,141,496.34	**0.9%**	31.7%	**A**

Products	2016 Needs	Assessed Value of 2016 Needs	%	Cumulative %	Pareto
GUANTE QUIRURGICO Nº 7 1/2;;;CAJA x 50 PARES EMPAQUE INDIVIDUAL ESTERIL	1,924,168.40	17,509,932.44	**0.9%**	32.6%	**A**
AMOXICILINA;500 mg;CAPSULA;BLISTER	12,672,688.40	17,234,856.22	**0.9%**	33.5%	**A**
DEXTROSA (GLUCOSA);0.5;INYECTABLE;FRASCO SOLUCION x 500 ml	79,085.80	17,224,887.24	**0.9%**	34.3%	**A**
CARTUCHO PARA GASES ARTERIALES PARA PH,PCO2,PO2,Na,K,Hct, CA;;;EMPAQUE ESTERIL CAJA x 25 Unidades	39,201.00	15,984,991.77	**0.8%**	35.1%	**A**
CATETER VENOSO PERIFERICO (CORTO) 20g;;;EMPAQUE ESTERIL INDIVIDUAL EN CAJA DE 50 UNIDADES	804,402.50	15,862,817.30	**0.8%**	35.9%	**A**
CATETER VENOSO PERIFERICO (CORTO) 24g;;;EMPAQUE ESTERIL INDIVIDUAL EN CAJA DE 50 UNIDADES	796,758.90	15,712,085.51	**0.8%**	36.7%	**A**
KETOROLACO TROMETAMOL;30 mg;INYECTABLE;AMPOLLA x 1 ml	779,200.88	15,085,329.10	**0.8%**	37.5%	**A**
AMOXICILINA + AC. CLAVULANICO;250 mg + 62.5 mg/5 ML;LIQUIDO ORAL;FRASCO x 120 ml	256,319.60	14,458,988.64	**0.7%**	38.2%	**A**
JERINGA 3 ML 21 X 1 1/2";;;SOBRE PLASTICO ESTERIL EN CAJAS DE 100 UNIDADES	9,135,039.00	14,342,011.23	**0.7%**	39.0%	**A**
HILI CATGUT CROMICO MULTIFILAMENTO M 1-0 AGUJA CURVA ROMA 1/2, 36.4 MM, 70 CM (GASTROINTESTINAL	159,552.50	14,142,733.60	**0.7%**	39.7%	**A**
PLACA RX 14 X 14;;;CAJA x 100 Unidades SELLADA	3,969.30	13,726,395.10	**0.7%**	40.4%	**A**
DEXTROSA;0.05;INYECTABLE;FRASCO SOLUCIÓN x 1 L	361,266.00	13,601,664.90	**0.7%**	41.0%	**A**
CEFTRIAXONA COMO SAL SODICA;1 g;POLVO P/ INYECCION;VIAL	1,012,174.20	13,472,038.60	**0.7%**	41.7%	**A**
PLACA RX 14 X 17 PARA RESONANCIA (TOMOGRAFIA);;;CAJA x 100 Unidades SELLADA	3,136.50	13,322,032.83	**0.7%**	42.4%	**A**
VANCOMICINA;1 g;POLVO P/INYECCION;VIAL	51,537.00	13,064,629.50	**0.7%**	43.1%	**A**
GUANTE QUIRURGICO Nº 8;;;CAJA x 50 PARES EMPAQUE INDIVIDUAL ESTERIL	1,427,261.90	12,988,083.29	**0.7%**	43.7%	**A**
OMEPRAZOL;40 mg/ml;INYECTABLE;VIAL	542,352.70	12,907,994.26	**0.7%**	44.4%	**A**
MEROPENEM;1 g;INYECTABLE;AMPOLLA	61,745.70	12,626,378.19	**0.6%**	45.0%	**A**
ERITROMICINA ESTEARATO;250 mg/5ml;SUSPENSIÓN ORAL;FRASCO x 120 ml	168,485.80	12,232,069.08	**0.6%**	45.6%	**A**
ACETAMINOFEN (PARACETAMOL);125 mg/5ml;LIQUIDO ORAL;FRASCO x 120 ml	823,316.80	12,152,155.97	**0.6%**	46.2%	**A**
ALCOHOL ETILICO;0.7;SOLUCIÓN;GALÓN	13,708.70	12,096,831.05	**0.6%**	46.8%	**A**
BAJANTE DE SUERO;;;SOBRE PLASTICO ESTERIL EN PAQUETES DE 20 Y 25 UNIDADES	1,625,633.50	11,428,203.51	**0.6%**	47.4%	**A**

Products	2016 Needs	Assessed Value of 2016 Needs	%	Cumulative %	Pareto
DIFENHIDRAMINA;10 mg;INYECTABLE;AMPOLLA x 1 ml	1,406,337.50	11,222,573.25	**0.6%**	48.0%	**A**
CATETER VENOSO PERIFERICO (CORTO) 18g;;;EMPAQUE ESTERIL INDIVIDUAL EN CAJA DE 50 UNIDADES	561,637.60	11,075,493.47	**0.6%**	48.5%	**A**
CEFALEXINA MONOHIDRATO;500 mg;CAPSULA;BLISTER	4,292,557.10	10,173,360.33	**0.5%**	49.1%	**A**
MECOBALAMINA;500 mcg;CAPSULA;BLISTER	1,598,328.40	9,893,652.80	**0.5%**	49.6%	**A**
ENOXAPARINA;20 mg/0.2 ml;INYECTABLE;JERNGUILLA PRECARGADA	91,795.40	9,655,040.17	**0.5%**	50.0%	**A**
PLACA RX 11 X 14;;;CAJA x 100 Unidades SELLADA	3,119.70	9,340,693.77	**0.5%**	50.5%	**A**
LACTULOSA;66.7 g/100ml;SOLUCIÓN;FRASCO x 240 ml	46,551.30	9,291,639.48	**0.5%**	51.0%	**A**
AZITROMICINA;200 mg/5ml;LIQUIDO ORAL;FRASCO x 30 ml	341,793.70	9,252,355.46	**0.5%**	51.5%	**A**