

Report No. 80178-PY

Republic of Paraguay

Building the future: Mid and long term vision for the Paraguay health sector development - Final Report Executive Summary

June 2012

Human Development Unit
Latin America and the Caribbean Region



Document of the World Bank

Currency and Equivalent Units

Currency Equivalents

Exchange Rate as of June 2012

Currency Unit	Paraguayan Guarani
US\$ 1.00	PYG 4,500

Government Fiscal Year

January 1 – December 31

Acronyms and Abbreviations

AECID	Agencia Española de Cooperación Internacional para el Desarrollo
AL	América Latina
APS	Atención Primaria de la Salud
ARV	Anti RetroVirales
BCG	Vacuna a base del Bacilo Calmette-Guérin
BCP	Banco Central del Paraguay
BE	Bioequivalencia
BID	Banco Interamericano de Desarrollo
BM	Banco Mundial
BPA	Buenas Prácticas de Almacenamiento
BPD	Buenas Prácticas de Dispensación
BPM	Buenas Prácticas de Manufactura
CAP	Conocimientos, Actitudes y Prácticas
CARICOM	Comunidad del Caribe
CD4	Cluster of Differentiation 4
CENABAST	Central de Abastecimiento de fármacos e insumos de Chile
CEPAL	Comisión Económica para América Latina y el Caribe
CEPEP	Centro Paraguayo de Estudios de Población
CIE 10	Clasificación Internacional de Enfermedades versión 10
CIFARMA	Cámara de la Industria Química Farmacéutica del Paraguay
CITEC	Comisión de Incorporación de Tecnología
CLS	Consejos Locales de Salud
CRIPFA	Cámara de Representantes de Productos Farmacéuticos y Afines
CRS	Consejos Regionales de Salud
DCI	Denominación Común Internacional
DGCP	Dirección Nacional de Contrataciones Públicas.
DGEEC	Dirección General de Estadísticas Encuestas y Censos
DGGIE	Dirección General de Gestión de Insumos Estratégicos
DGVS	Dirección General de Vigilancia de la Salud
DIU	Dispositivo Intra Uterino
DNVS	Dirección Nacional de Vigilancia Sanitaria

DOTS/TAES	Tratamiento Acortado Directamente Observado
DPI	Dirección de Propiedad Industrial
DPT	Vacuna Difteria-Pertussis-Tétano
DVENT	Dirección de Vigilancia de Enfermedades No Transmisibles
ENDSSR	Encuesta Nacional de Salud Sexual y Reproductiva
ENFR	Encuesta Nacional de Factores de Riesgo
ENO	Enfermedades de Notificación Obligatoria
ENSMI	Encuesta Nacional de Salud Materno Infantil
ENT	Enfermedades No Transmisibles
EPH	Encuesta Permanente de Hogares
ESSAP	Empresa de Servicios Sanitarios del Paraguay
EVN	Esperanza de Vida al Nacer
FA	Fiebre Amarilla
FAO	Organización de las Naciones Unidas para la Agricultura y la Alimentación
FONAPS	Fondo Nacional de Atención Primaria de la Salud
GDP	Gross Domestic Product
HSH	Hombres que tienen sexo con hombres
IPS	Instituto de Previsión Social
IPS	Instituto de Previsión Social
LBME	Listado Básico de Medicamentos Esenciales
LV	Leishmaniasis Visceral
MAC	Medicamentos de Alto Costo
MH	Ministerio de Hacienda
MI	Mortalidad Infantil
MIC	Ministerio de Industria y Comercio
MJT	Ministerio de Justicia y Trabajo
MM	Mortalidad Materna
MSPyBS	Ministerio de Salud Pública y Bienestar Social
OBAT	Organizational and Behavior Assessment Tool
ODM / OMD	Objetivos de Desarrollo del Milenio
OMS	Organización Mundial de la Salud
OPS	Organización Panamericana de la Salud
PACs	Planes Anuales de Contrataciones
PAHO	Pan American Health Organization
PAI	Programa Ampliado de Inmunizaciones
PENFRENT	Primer Encuesta Nacional de Factores de Riesgo y Enfermedades No Transmisibles
PIB / PBI	Producto Interno Bruto
PNCL	Programa Nacional de Control de la Lepra
PNCT	Programa Nacional de Control de Tuberculosis
PNUD	Programa de las Naciones Unidas para el Desarrollo
PPL	Hombres y Mujeres privadas de libertad

PPP	Purchasing Power Parity
PROAN	Programa Nacional de Asistencia Alimentaria y Nutricional
PRONASIDA	Programa Nacional de lucha contra el VIH SIDA
RED PARF	Red Panamericana para la Armonización de la Reglamentación Farmacéutica de la OPS
RISS	Red Integrada de Servicios de Salud
RRHH	Recursos Humanos
SEA	Suministro de Energía Alimentaria disponible para el consumo humano
SENASA	Servicio Nacional de Saneamiento Ambiental
SENEPA	Servicio Nacional de Erradicación del Paludismo
SIAF	Sistema Integrado de Administración Financiera
SICIAP	Sistema de Información y Control de Inventario de Paraguay
SICP	Sistema de Información de Contrataciones Públicas
SIDA	Síndrome de Inmuno Deficiencia Adquirida
SIMA	Sistema de Información de Monitoreo Administrativo
SINAR	Sistema de Información y Análisis sobre Reforma del Sector Salud
SSIEV	Subsistema de Información de Estadísticas Vitales
SSIFS	Subsistema de Información de Financiamiento en Salud
SSILS	Subsistema de Información de Logística en Salud
SSIRRF	Subsistema de Información de Recursos Físicos
SSIRRH	Subsistema de Información de Recursos Humanos
SSISS	Subsistema de Información de Servicios de Salud
SSIVSA	Subsistema de Información de Vigilancia de la Salud y el Ambiente
TB	Tuberculosis
TBC	Tuberculosis
TSF	Trabajadoras Sexuales Femeninas
TSM	Trabajadoras Sexuales Masculinos
UDI	Usuarios de Drogas Inyectables
UER	Unidades Epidemiológicas Regionales
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USF	Unidades de Salud Familiar
UTEPI	Unidad Técnica de Estudios para la Industria
VIH	Virus de la Inmunodeficiencia Humana
VPH	Virus del Papiloma Humano
WHO	World Health Organization

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Explanatory Note 1

The parties responsible for this document respect the policy of avoiding gender discrimination and are aware that the use of non-gender-neutral language constitutes sexist bias from this perspective. Nevertheless, conventional language has been used here with a view to making the text more readable, in the belief that this will facilitate comprehension without violating the spirit of the gender-neutral principle.

Explanatory Note 2

The executive summary refers many times to the main document and to Annex. These can be found in the Spanish version of the same document.

Executive Summary

1. In 2009, the Paraguayan Government's Ministry of Health and the World Bank agreed to conduct technical cooperation work, which included two specific studies and an analysis of the public health sector, with a view to identifying medium- and long-term health sector policy formulation options. The specific studies were on (i) the national pharmaceutical sector, and (ii) the social determinants of health.
2. When this technical cooperation agreement was reached, there was a shared vision (among international organizations, assistance agencies, and the new Government) on the 2008 assessment of the health sector, which depicted a complex situation:
 - 2.1. Poverty, which had steadily declined since 2003, nevertheless remained at very high levels, particularly in rural areas.
 - 2.2. Health indicators pointed to poor outcomes—the trend was one of stagnation and, in some instances, deterioration,¹ along with high rates of infant and maternal mortality, and high morbidity and mortality associated with preventable diseases, despite the increase in public health expenditure since 2003.
 - 2.3. Limited access to health services, with economic and geographic barriers to access and low quality of these services.
 - 2.4. Major disparities among the different socioeconomic groups and among different geographic regions, given that the health indicators of the rural areas and poor population groups were worse than those of other groups.
 - 2.5. Inadequate public health care, with steady deterioration over the past ten years. The risk of epidemics and/or outbreaks of dengue and yellow fever were high.
 - 2.6. Longstanding institutional problems, including: (i) lack of coordination within the public health sector; (ii) weak capacity to pass and enforce regulations; (iii) high degree of centralization in decision making; (iv) low levels of budget implementation, along with a high percentage of human resource expenditure, frequent problems with shortages in the supply of drugs and basic medical supplies in the public service network, and strong suspicions of corruption.² In addition, there was a longstanding problem of governability, reflected in high turnover in health sector ministerial officials.
 - 2.7. Consensus among international organizations such as USAID, PAHO,³ and the World Bank that there was little likelihood that Paraguay would achieve its 2015 Millennium Development Goals.
3. In light of this assessment, the Ministry of Health began the formulation of a structural reform plan that would pave the way for a break with the negative trends and stagnation and,

¹ Policy Notes. Economic and Social Development Options for the period 2008-2013, Note N° 11, Health, World Bank, 2008.

² Presentation by the Ministry of Public Health and Social Welfare. Report on the 2009 Contingency Plan.

³ PAHO-USAID. 2008. "Health Systems Profile – Paraguay – Monitoring and Analyzing Health System Change/Reforms;" PAHO, Washington, D.C, USA. January 2008.

in 2008, started to implement a contingency plan for the Government's first eighteen months in office, defining the policy focal areas of its term in office.

4. These focal areas were supported by a sharp increase in the public health budget, which was aimed largely at improving access to basic health services and epidemiological surveillance, through the use of a number of policy instruments.

Dialogue Box No. 1: Health Policy Focal Areas
<ul style="list-style-type: none">• Gradual elimination of fees and copayments for ambulatory consultations, hospitalization and diagnostic services, treatment in public hospitals and clinics owned by the Ministry of Public Health and Social Welfare (MPHSW).• Increase in the budget of the Ministry of Public Health and Social Welfare.• Start up of the Regional Health Councils (CRS) and Local Health Councils (CLS) functioning, with transfer of budgetary resources to support the decentralization process, reaching 11,5 million dollars (1,6% MPHSW budget).• Extension of the immunization program and strengthening of the epidemiological surveillance program and control of outbreaks, and prevention of cancer among women.• Improvement of primary health care through the creation of Family Health Units (USFs).• Intervention in the drug market. List of Essential Medicines, centralization of purchases, systematization of processes, and the creation of such IT platforms as electronic auctions.• Expansion of water and sanitation coverage through the Water and Sanitation Sector Modernization Program funded by the World Bank.
Source: Prepared by the author using Ministry of Public Health and Social Welfare Data

5. The development of this study, beginning in 2009, facilitated technical exchanges and policy dialogue with the authorities throughout the process, which included the organization of workshops and the submission to the Ministry of Public Health and Social Welfare in December 2010 of two technical documents, one of which focused on the social determinants of health and the other, on drug policy, which are included in the annexes to this report; as well as to bring technical assessment to the Ministry of Public Health and Social Welfare about Health Services Integrated Networks (Redes Integradas de Servicios de Salud - RISS).
6. This report analyzes the available evidence on changes and trends in the state of health of the Paraguayan population through 2010/2011, taking into account the policy guidelines and institutional changes introduced during the final period of the Government's term⁴ and the trends in a number of social determinants of health.⁵
7. It is hoped that this report will contribute to the development of a medium- and long-term strategy, with the ultimate aim of improving health outcomes, and will serve as a tool that

⁴ Including the extent to which policies were explained, the consistency of these policies, the structure of the Ministry of Public Health, and the provision of services, budget, and information systems.

⁵ The analysis of these determinants is based on information in the 2008 and 2009 Ongoing Household Surveys.

provides information and recommendations that can also create new opportunities for collaboration in the area of sectoral dialogue in the country.

Recent Trends in the Population Health Situation:

8. **Although the health information systems are improving, their output remains poor.** Historically, Paraguay has had great difficulty compiling and validating vital statistics and health information. The weaknesses in health data registration systems have led to incomplete and unreliable statistics. The country maintains parallel official time series data with (i) recorded values, and (ii) estimated values based on census findings' projections.⁶ As would be expected, actual and recorded results differ for the same indicator.
9. In recent years, significant strides have been made, such as the redesign of the Health Information System, along with encouraging progress in its implementation. As a result, the majority of health regions and departments can now compile information, compared to 2004, when this activity was taking place in only a few places.
10. **The available information points to a number of positive trends in the health situation of the population**
 - 10.1. **Decline in the maternal mortality rate.** Maternal mortality has declined steadily from 174.0 per 100,000 live births in 2003 to 100.8 per 100,000 live births in 2010. The main causes are linked to miscarriages (25 percent), hemorrhaging (27 percent), and toxemia (17 percent) which, when combined, amount to 69 percent.
 - 10.2. **Infant mortality has declined slightly in the past decade, boosted by the decline in the post-neonatal component.** Based on information in the health records, between 2000 and 2010 the infant mortality rate fell by 3.9 per thousand—from 20.2 per 1,000 live births to 16.3 per 1,000 live births, while there was a steady decline in the post-neonatal mortality rate, which fell from 9.2 per 1,000 live births in 2000 to 6.1 per 1,000 live births in 2005 and to 4.7 per 1,000 live births in 2010. The neonatal mortality rate ranged from 11 and 12 per 1,000 live births between 2005 and 2010 (in 2010 it stood at 11.7).⁷

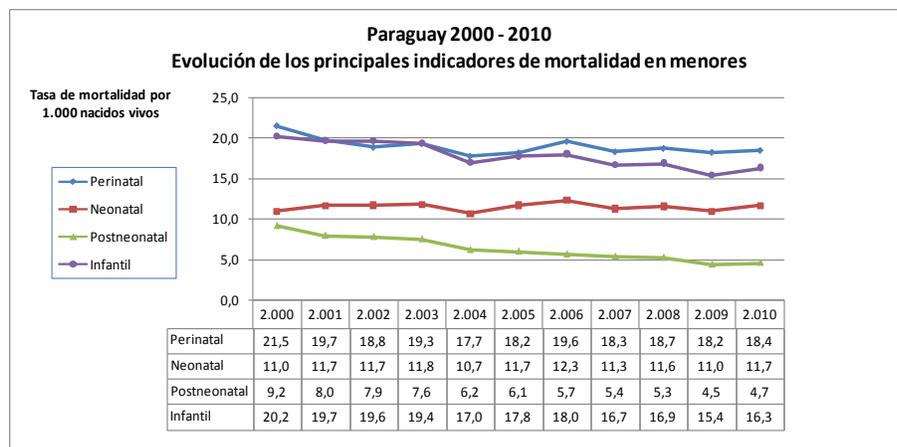
Although recorded perinatal mortality also trended downward, the values of the set over the years are not entirely comparable, owing to changes in the definition of both the numerator and denominator.⁸

⁶ The most recent adjustment was made to the population census in 2002, with the projection being done through 2050. DGEEC, 2005: Paraguay, national population projection by gender and age, 2000-2050.

⁷ The recorded infant mortality rate was lower than the rate estimated for demographic purposes, which stood at 30.4 deaths per 1,000 live births in 2010.

⁸ Calculation of the perinatal rate was modified owing to a new, verifiable ICD-10 definition. The period considered was brought forward to 22 weeks of gestation for fetal deaths in the case of the numerator and, in the case of the denominator, fetal deaths were included, in addition to live births.

Chart 1.2: Trends in Perinatal, Neonatal, Post-neonatal and Infant Mortality in Paraguay



Source: Department of Biostatistical Information – DIGIES, Ministry of Public Health and Social Welfare. Data from the Vital Statistics Information Subsystem

10.3. **Specific rates of infant mortality and mortality in children under age five linked to child malnutrition and anemia have fallen.** While the rate of infant mortality caused by malnutrition and anemia fell steadily from 0.50 per 1,000 live births in 2008 to 0.28 per 1,000 live births in 2010, the specific mortality rate in children between the ages of 1 and 4 linked to nutritional diseases and anemia fell from 6.0 per 100,000 inhabitants in 2008 to 1.4 per 100,000 inhabitants in 2010.⁹

10.4. **As a result of progress made with controlling malaria, the referred 2015 MDGs are within reach.** The Strategic Plan for the Elimination of Malaria, which was implemented and maintained since 2005, involving evaluation and treatment in health regions and local governments working in the area of environmental management, has led to a more than 90 percent reduction in cases during the 2000-2010 decade.

10.5. **Chagas disease.** With household infestation of *Triatoma infestans* in the departments at greatest risk having fallen from an average of 15 percent in 2000 to 0.02 percent in 2010, the less than one percent 2015 MDG has therefore been achieved. The Oriental region of Paraguay has achieved the elimination of vector transmission.

10.6. The incidence of **tuberculosis** has been declining over the past decade.¹⁰ In recent years, detection rates of respiratory symptoms have improved (77 percent), as has bacteriological confirmation through strategies targeting at-risk groups such as the indigenous population and persons deprived of liberty. In terms of the treatment success rate, a target of 90 percent was set, and an actual country-wide rate of 82 percent was achieved in 2010.

⁹Source: Department of Biostatistical Information – DIGIES, MPHWS, 2012. Data from the Vital Statistics Information Subsystem (SSIEV).

¹⁰ Source: Reportable Diseases and Epidemiological and Weekly Bulletins. General Bureau of Health Surveillance, MPHWS.

In: http://www.vigisalud.gov.py/index.php?option=com_phocadownload&view=section&id=8&Itemid=140, consulted May 3, 2012.

10.7. **Expanded coverage of the immunization program.** In 2004, only 65.2 percent of children between the ages of 12 and 23 months had completed the full program of vaccinations (BCG, Polio, DPT and measles), while in 2009, 99.1 percent of children between the ages of one and eight had received that full range of vaccines. However, geographical disparities remain with respect to the full vaccination program.

11. *However, health outcomes still need to be improved*

11.1. Paraguay currently has a two-fold morbidity problem, given that communicable diseases and maternal, perinatal, and nutritional conditions continue to play a significant role in deaths. In 2010, 42.2 percent of deaths reported were attributable to circulatory system diseases, tumors, and cerebral-vascular diseases, 6.8 percent to diabetes mellitus, and 7.5 percent to accidents (in 2008, 8 percent of deaths were attributable to vehicular injuries).

11.2. Paraguay has become an endemic country with respect to such preventable diseases as yellow fever and as other mosquito-borne diseases such as dengue. In addition, challenges exist in terms of controlling other communicable diseases such as leishmaniasis, Hantavirus, and the potential risk of cholera, given the outbreak in Chaco some time ago. Efforts to combat these diseases have been stymied by structural issues related to social determinants and the low capacity of local governments (municipalities) to enforce environmental regulations and control measures.

12. *Structural conditions and social determinants stymie better performance in terms of health outcomes. The main ones are:*

12.1. **The high level of poverty.** According to the 2010 Permanent Survey of Households (PSH), 34.7 percent of the Paraguayan population lives below the poverty line and almost 20 percent lives in conditions of extreme poverty (indigence). The poverty rate is uneven throughout Paraguay. Rural poverty stands at 48.9 percent, while the poverty rate among the urban population is 24.7 percent. Poverty in the indigenous population areas is also higher than in urban areas.

12.2. **A significant segment of the population lacks education.** Almost 4 percent of the adult population in Paraguay did not have access to formal education, 43 percent completed primary education, 33 percent, secondary education, and close to 14 percent completed higher education. This situation impacts knowledge of good practices in the area of health conservation, the reduction in risky conduct, and disease prevention.

The following can be mentioned, by way of example:

- In 2008, vaccination coverage for the children of women with 12 or more years of education was 1.3 times higher than it was for the children of women with fewer than five years of education.
- The percentage of institutional births stands at 96 percent for women with more than 12 years of education and at 64 percent for women with fewer than six years of education.

- In terms of the level of awareness of Papanicolaou tests, there are no major differences in women between the ages of 15 and 44, although women with low levels of education do not seem to be aware of the test. There are differences in terms of the use of this test.

12.3. **A high percentage of the population lives with substandard water supply and excreta disposal services.** Well water is the second most widely used source of water by the population. This includes artesian wells as well as protected and unprotected wells. No information is available on the quality of the water coming from the wells and only a small percentage of the population has access to a drainage system connected to the sewerage network (8 percent) or a flush toilet and a septic tank (30 percent). Twenty-nine percent of the population use latrines as their sanitation system, the majority of which are open, and 48 percent do not have a proper waste disposal system and thus burn household waste, a practice that impacts both the environment and the health of individuals.¹¹

12.4. **Barriers to Access to Services Persist**

12.4.1. Financial access still seems to be a barrier to access to health services for low-income population groups. In 2010, three percent of individuals indicated that they had not had a health service consultation because such consultations are expensive. This percentage stood at eight percent in 2008, a change that is consistent with the policy of free services introduced. However, average out-of-pocket expenditure has not changed significantly and goes mainly toward drugs, perhaps because the free supply of drugs is not always steady and comprehensive, a situation that has led to a shift in expenditure. Another factor to be taken into account is the percentage of the population not receiving medical care because such persons are self-medicating.

12.4.2. The geographic availability of health services limits access only in some regions of the country. This is consistent with the 2009 PSH, according to which only four percent of health services access problems were attributable to geographic factors. However, this problem affects mainly the population groups with the lowest income.

12.4.3. Although the model of care, infrastructure, and staffing of USFs do alleviate the problem, a significant portion of the health services available to the population does not allow for many of the problems to be resolved or for diagnoses to be made.

12.4.4. Trends in the neonatal mortality rate and the persistent nature of the causes of maternal mortality point to structural problems in the quality of care.

12.5. **Territorial and social inequity.** In 2011, Paraguay, with a Human Development Index of 0.665 (evaluated as medium development), ranked last in South America in terms of human development, along with Bolivia.¹² However, there is great inequality

¹¹ PSH, 2010

¹² According to the Human Development Index prepared by UNDP

within the country, with Asunción being well above average in all of Latin America and the Caribbean, and Alto Paraguay, well below the national index. The pattern of inequality is also reflected in socioeconomic groups within the interior departments. To mention just a few:

- 12.5.1. More than 70 percent of the adults in the lowest-income quintile only reached the sixth grade or lower, while the top quintile of the same proportion of the population attended secondary school or institutions of higher learning. Educational levels also varied by area, with the population in urban zones and Asunción and Central departments having achieved higher levels of education.
- 12.5.2. Pregnancy rates among adolescents and young adults differ by area of residence, with these rates being higher in rural areas than in urban areas (33.1 percent and 22.7 percent, respectively).
- 12.5.3. The maternal mortality rate, based on the records of the region with the highest mortality, Alto Paraguay, is 15 times higher than the rate in the region with the lowest mortality, Cordillera. Similarly, in Concepción, the region with the highest rate, the neonatal and infant mortality rates as well as the mortality rates in children under age five are two and a half times higher than the rates in Misiones, the health region with the lowest rates.

Policy Guidelines since 2008:

13. In 2008, a health sector reform process was launched by the new administration that took office that year. The main features and findings related to these reforms are presented below:

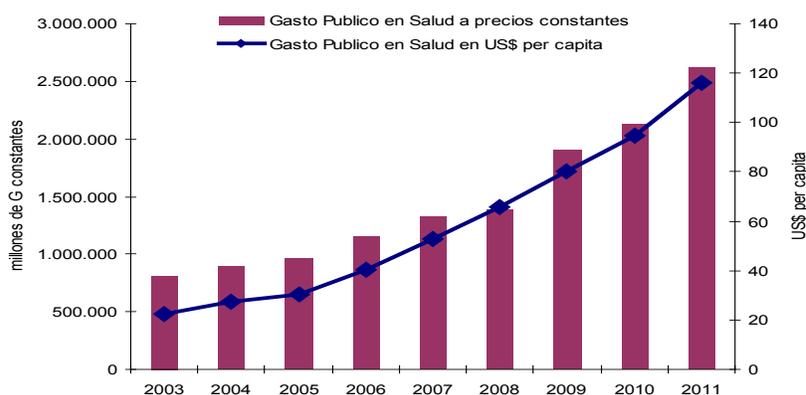
- 13.1. The clarification of the sectoral policy guidelines (Public Policies and the Quality of Life and Health with Equity)¹³ and the consistency of its application and management have had a positive effect on the governability and governance of health processes. In view of the fact that the health behaviors of the persons seeking health care as well as health care providers are shaped by cultural factors, health policies require continuity and sustainability if their application is to achieve the desired effect. However, explaining these factors is critical to the change process, in terms of shaping the perceptions of social actors and facilitating discussion, surveillance, and monitoring. In recent years, health policies were explained to society prior to their execution and these policies were applied on a sustained basis throughout the Government's term in office, under the supervision of a single sectoral ministry.¹⁴ The explanation of policies beforehand and the sustained nature of these policies during the Government's entire term in office, both of which are unprecedented situations, seem to have been very important to the perception of the credibility of policies and to ensuring that the benefits of these policies can begin to be discernible.

¹³ PATRIOTIC ALLIANCE FOR CHANGE: Discussion points for a government program - Quality of Life and Health with Equity (PPT Presentation). See details in Annex 1.

¹⁴ Annex 1 provides a detailed account of the health policy guidelines of the Lugo Administration.

13.2. Between 2003 and 2011, the public health budget quadrupled in constant value terms, and between 2008 and 2011, the level of execution of MPHSW appropriated funding rose significantly,¹⁵ thus making it possible to offer free health services and improve the availability of drugs and medical and health care supplies in the public network, albeit not in a steady or uninterrupted fashion, and to expand the supply of services through the USF network. There is evidence of a substitution effect in the use of private health services with public health services and a probable shift from private expenditure on health services to private health expenditure on drugs, perhaps owing to the fact that though the supply of public drugs is now free, it has not been comprehensive or steady.

Chart 1.1: Public Expenditure on Health
In millions of constant guaraníes and dollars (per capita)



Source: Prepared by the author using Ministry of Finance Information

- Public expenditure on health, taking into account the budget of the MPHSW and IPS health benefits as a percentage of output, increased sharply beginning in 2008, from 2.4 percent of GDP to 4 percent in 2011, according to provisional budget execution data. This increase is even more significant taking into account the sharp increase in the Paraguayan GDP during this period.
- This expenditure also increased relative to the total Central Government expenditure, albeit more modestly—from 15 percent in 2008 to 17.5 percent in 2011 (these figures correspond to public expenditure on health, including IPS benefits).
- Another noteworthy aspect is that the level of execution of appropriated funding by the MPHSW rose to 89.8 percent in 2011. This achievement (which points to major progress compared to 2008) is even more significant taking into account the fact that the budget of the Ministry of Public Health and Social Welfare increased significantly in 2011—by almost 23 percent relative to 2010 (reaching US\$470 million). In terms of the financial classification of expenditures based on budget information, 62 percent of the expenditure falls into the personnel category, 22 percent into consumer goods and medical supplies category, and 9 percent, into the investment category. This distribution has not changed in recent years.

¹⁵ In 2011, it stood at 89.8 percent

13.3. The redesign of the primary health care system through USFs has improved access because of their territorial distribution and work methods. During the last fiscal year, 200 USFs were set up in 11 districts of 17 health regions, bringing the number of USFs in operation to 704. These units provide primary health care coverage to 2.4 million persons who do not have explicit health insurance (almost one-third of the population).

Proposals: Medium and Long-Term Policy Focal Areas:

14. The situation described suggests that the increase in budgetary resources and improved sectoral governance through continuity of the policy are beginning to alter some of the basic health indicators, particularly since 2008, improving some and stabilizing others.
15. These results have been achieved in the context of significant economic growth that still has not managed to reduce poverty significantly, with all that this implies in terms of the factors (education, access to basic services, etc.) that act as social determinants of health conditions.
16. A long haul view should perhaps include improvements in the contextual conditions in which a health system operates. However, identifying actions aimed at achieving these improved conditions is a difficult task requiring work in different areas, some of which do not fall squarely into the realm of sectorial policy.
17. The two-fold disease problem facing the country can be solved only through a combination of strategies that improve the care options and conditions of persons who are currently ill and at the same time aggressively contain and reduce the problems associated with non-communicable diseases, particularly those chronic non-communicable diseases attributable to lifestyle.
18. It is against this backdrop that the following policy guidelines are formulated, many of which are complementary and mutually reinforcing, commended for design in the short and medium term and outreach of results in medium and long term:

Health Care system:

18.1. Expansion of PHC and Decentralization:

- 18.1.1. Continue the policy of establishing USFs based on a PHC strategy aimed at providing the entire population with access to providers with a greater capacity to resolve problems.
- 18.1.2. Maintain the Equity Fund for the Decentralization of Health Services by implementing and strengthening distribution mechanisms and incentives based on criteria of equity and efficiency reflected in outcomes. In view of the fact that implementation of such policies is complex and that the amounts currently

involved are relatively small, it is important for the mechanisms initially designed and implemented to be simple, while permitting monitoring and oversight.

18.2. **Improvement in the supply of health services**, by continuing the work started in areas under MPHSW oversight, where there is ample room to make progress in:

18.2.1. Achieving an uninterrupted, steady, and nationally comprehensive supply of essential drugs.

18.2.2. Achieving coordination among the various levels of the health sector.

18.2.3. Developing a policy for human resources working in the health area, in particular identifying incentives to work in the interior areas and training these resources in service, with initial emphasis on reproductive health problems and neonatal problems, since that current health indicators relating to their care are showing problems of quality of care.

18.2.4. Developing and strengthening health information systems; which should continue the application of the current strategic plan to improve and better coordinate health information that is collected by the National Statistics and Census Surveys. Should be of interest to the PHS incorporation of information on the nutritional status of the population, given the immaturity of systems based on data collected by the network of public health providers to assess the nutritional situation of the population.

18.2.5. Implementing a policy of regulation of the producers and vendors of pharmaceutical products; to make essential medicines available to the entire population without coverage.

18.2.6. Achieving functional integration with the network of IPS health services, thus fostering institutional synergies and making it possible to address the lack of structural coordination.

18.3. **Increased use of monetary transfers contingent on health checks and educational targets.** The problem of structural poverty in the country poses a challenge at all levels of government, including in the health area. There is sound international experience with strategies to improve health outcomes by making monetary transfers to low-income population groups without coverage, contingent on the performance of these checks and the achievement of targets.

Public Health Policies:

18.4. **Deepen inter-sectoral actions with the regional and municipal authorities in the areas of:** (i) control and provision of potable water; (ii) environmentally sustainable control and management of urban solid waste and wastewater; (iii) control of vector-borne and zoonotic diseases; (iv) the creation of healthy spaces at the local level; and (v) actions to reduce vehicular traffic accidents. In these areas, apart from the

responsibilities of the different areas of government to finance the investments needed, it is important to strengthen the regulatory and oversight role of the MPHSW.

- 18.5. **Engage in joint activities with other areas of the Central Government, particularly in public health policies;** e.g.: (i) **Education and the media**, on the immense task of promoting and establishing healthy lifestyle habits that prevent non-communicable diseases; (ii) **Justice and Labor**, on the prevention of on-the-job risks and the promotion of health work environments; (iii) **Finance**, on the regulation of taxes on tobacco, alcohol, and sweetened beverages; (iv) **Industry and Trade**, on the regulation of food labeling, salt content, and preservatives in processed foods; (v) **Public Works and Communications**, on improved access to remote areas; and (vi) **Energy**, on the provision of sources of renewable energy (solar panels) to remote care centers.
19. Lastly, one determinant of the achievement of long-term health policy results is the continuation and expansion of governance of the sector. In this regard, efforts need to be redoubled in order to build consensus and social acceptance of long-term goals and policy guidelines. In this context, and with adequate accountability, measures to maintain the social budget with the aim of preserving the gains made can be justified.

Structure of the Report:

20. Chapter one briefly describes Paraguay's macroeconomic and fiscal situation and the structure of the health sector and analyzes health policy trends from 2008 to date.
21. Chapter two addresses the changes in health conditions in Paraguay and in trends through 2010/2011 in light of the policy guidelines and institutional changes introduced during the Government's final term.
22. Chapter three describes the main findings obtained from an analysis of trends in social determinants of health. The different sources of information used for Chapters two and three result in numerical differences in the variables analyzed. However, these do not change the overall thrust of the interpretations.
23. Chapter four outlines the policy options identified to produce medium- and long-term health outcomes.

Annexes:

24. Annex 1 outlines the policies put forward during the Government's 2008-2012 term; Annex 2 describes the health situation in Paraguay relative to other countries; Annex 3 deals specifically with the Equity Fund for Decentralization in Health; Annex 4 addresses international assistance to Paraguay; Annex 5 describes the MPHSW Health Information System; and Annexes 6 and 7 present, as independent reports, the "Assessment of the Pharmaceutical Sector and Drug Policy Options," and the "Assessment of Health Determinants," respectively, prepared by the MPHSW in the context of this cooperation agreement.

Data Sources:

25. Multiple sources of data were used in the preparation of this report, among them information from different demographic and health surveys, administrative records, two household surveys conducted by the DGEEC, OHS time series from 2000/2001- 2009, the 2008 CEPEP database for the National Demographic and Sexual and Reproductive Health Survey, information from UNDP, PAHO, and UNFPA, and information from the Ministry of Health, which made it possible to obtain databases containing production and epidemiological information. In preparing this report, numerous interviews were conducted with officials in various government agencies, lawmakers, and businesspersons working in the area of pharmaceutical drugs, with a view to compiling specific information and obtaining their views on the health sector.