

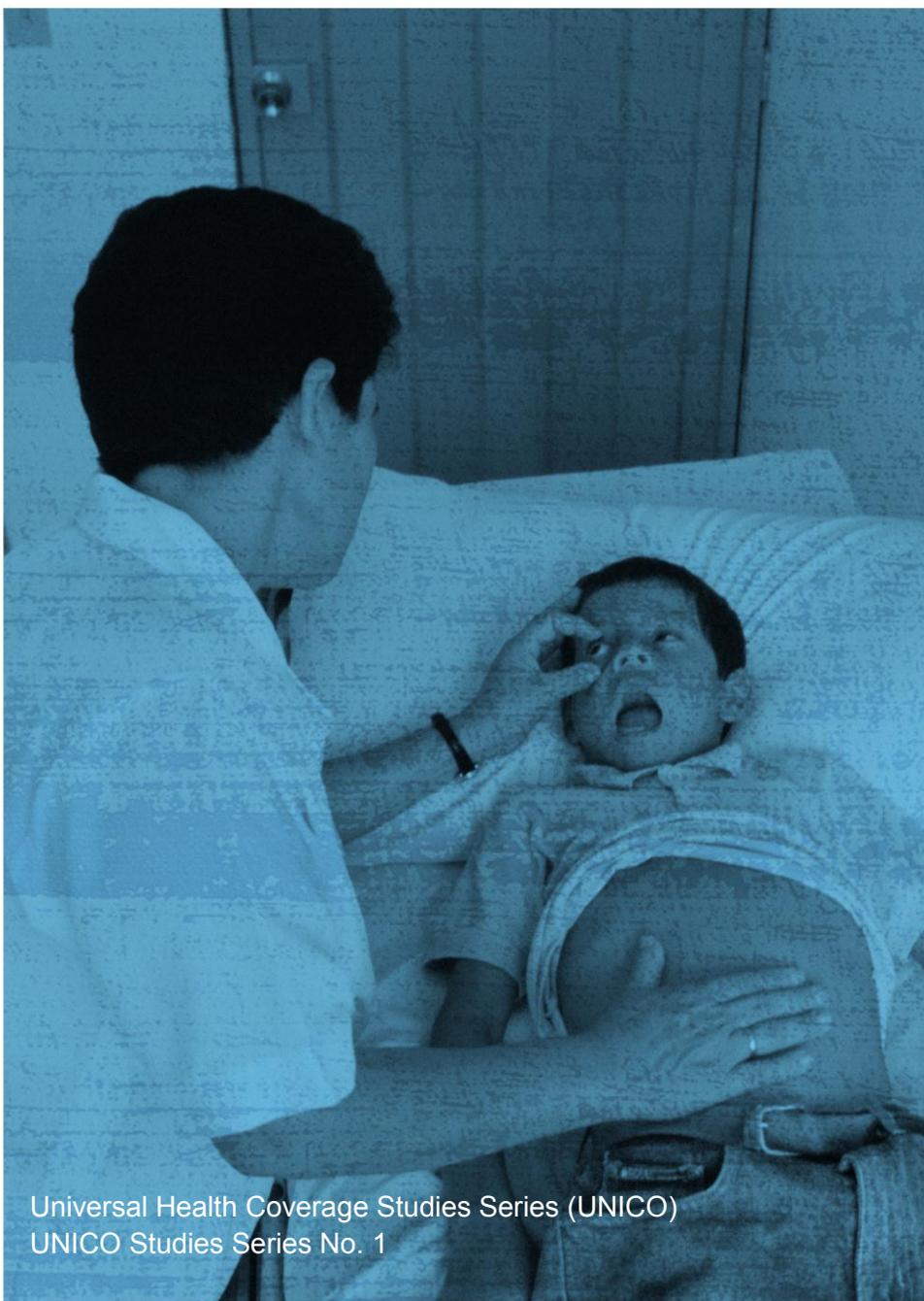


THE WORLD BANK

The Mexican Social Protection System in Health

75008

M.E. Bonilla-Chacín
and Nelly Aguilera



UNICO Studies Series 1

The Mexican Social Protection System in Health¹

M. E. Bonilla-Chacín and Nelly Aguilera

The World Bank, Washington DC, January 2013

¹ This paper was prepared by María E. Bonilla-Chacín and Nelly Aguilera. The paper benefited from comments received during the Authors' Workshop in July 2012, and from the comments of the National Commission for the Social Protection in Health, Jack Langenbrunner (Peer Reviewer), Sarbani Chakraborty (Peer Reviewer), and Wendy Cunningham (Sector Leader). The paper was prepared under the guidance of Joana Godinho (Sector Manager).

The World Bank’s Universal Health Coverage Studies Series (UNICO)

All people aspire to receive quality, affordable health care. In recent years, this aspiration has spurred calls for universal health coverage (UHC) and has given birth to a global UHC movement. In 2005, this movement led the World Health Assembly to call on governments to “develop their health systems, so that all people have access to services and do not suffer financial hardship paying for them.” In December 2012, the movement prompted the United Nations General Assembly to call on governments to “urgently and significantly scale-up efforts to accelerate the transition towards universal access to affordable and quality healthcare services.” Today, some 30 middle-income countries are implementing programs that aim to advance the transition to UHC, and many other low- and middle-income countries are considering launching similar programs.

The World Bank supports the efforts of countries to share prosperity by transitioning toward UHC with the objectives of improving health outcomes, reducing the financial risks associated with ill health, and increasing equity. The Bank recognizes that there are many paths toward UHC and does not endorse a particular path or set of organizational or financial arrangements to reach it. Regardless of the path chosen, successful implementation requires that many instruments and institutions be in place. While different paths can be taken to expand coverage, all paths involve implementation challenges. With that in mind, the World Bank launched the Universal Health Coverage Studies Series (UNICO Study Series) to develop knowledge and operational tools designed to help countries tackle these implementation challenges in ways that are fiscally sustainable and that enhance equity and efficiency. The UNICO Studies Series consists of technical papers and country case studies that analyze different issues related to the challenges of UHC policy implementation.

The case studies in the series are based on the use of a standardized protocol to analyze the *nuts and bolts* of programs that have expanded coverage from the bottom up—programs that have started with the poor and vulnerable rather than those initiated in a trickle-down fashion. The protocol consists of nine modules with over 300 questions that are designed to elicit a detailed understanding of how countries are implementing five sets of policies to accomplish the following: (a) manage the benefits package, (b) manage processes to include the poor and vulnerable, (c) nudge efficiency reforms to the provision of care, (d) address new challenges in primary care, and (e) tweak financing mechanisms to align the incentives of different stakeholders in the health sector. To date, the *nuts and bolts* protocol has been used for two purposes: to create a database comparing programs implemented in different countries, and to produce case studies of programs in 24 developing countries and one high-income “comparator,” the state of Massachusetts in the United States. The protocol and case studies are being published as part of the UNICO Studies Series, and a comparative analysis will be available in 2013.

We trust that the protocol, case studies, and technical papers will provide UHC implementers with an expanded toolbox, make a contribution to discussions about UHC implementation, and that they will inform the UHC movement as it continues to expand worldwide.

Daniel Cotlear
UNICO Studies Series Task Team Leader
The World Bank
Washington, DC

TABLE OF CONTENTS

| | |
|---|----|
| Abbreviations..... | iv |
| Executive Summary..... | v |
| 1. Introduction..... | 1 |
| 2. General Health System Overview of Financing and Delivery..... | 2 |
| 3. SPSS Institutional Architecture and Interaction with the Rest of the Health System..... | 3 |
| 4. Targeting, Identification, and Enrolment of Beneficiaries..... | 8 |
| 5. Management of the HCP’s Benefits Package..... | 9 |
| 6. The Information Environment of the Health Coverage Program..... | 10 |
| 7. Discussion of One Theme Specific to Mexico..... | 10 |
| 8. Pending Agenda..... | 14 |
| Annex 1. Brief Description of Public Health, Primary Care, and Key Supply-side Efforts..... | 17 |
| Annex 2. Spider Web..... | 19 |
| References..... | 22 |

FIGURES

| | |
|--|----|
| Figure 1 Mexico Health Care System: Sources of Funds, Agents, and Providers, 2010..... | 3 |
| Figure 2 Total Expenditure on Health and Public Expenditure on Health as Percentage of GDP in Latin America and the Caribbean, 2000..... | 4 |
| Figure 3 Financing of the SPSS, Mexico..... | 6 |
| Figure 4 Concentration Coefficients for Selected Social Programs, Mexico, 2010..... | 8 |
| Figure 5 Trends in Affiliation to the Popular Health Insurance..... | 11 |
| Figure 6 Trends in Total Health Expenditure (THE), Government Health Expenditure,..... | 15 |

TABLES

| | |
|--|----|
| Table 1 Evolution of Fiscal Imbalances in the Health sector..... | 11 |
| Table 2 Utilization of Health Services when Ill – SPSS, Uninsured, and Social Security Households..... | 12 |
| Table 3 Annual Out-of-Pocket Expenditure for Matched Pairs – SPSS, Uninsured, and Social Security.. | 13 |
| Table 4 Incidence of Catastrophic Expenditure for Matched Pairs – SPSS, Uninsured, and Social Security Households..... | 13 |

Abbreviations

| | |
|----------|--|
| ADL | activities of daily living |
| CAUSES | Universal Health Services Catalogue, Catálogo Universal de Servicios de Salud |
| CCT | Conditional Cash Transfer |
| CNPSS | National Commission for the Social Protection in Health, Comisión Nacional de Protección Social en Salud |
| CONAPO | National Population Council, Consejo Nacional de Población |
| FPGC | Catastrophic Health Expenditure Fund, Fondo para la Protección contra Gastos Catastróficos |
| FUNSALUD | Mexican Health Foundation, a private health think tank |
| GDP | gross domestic product |
| IMSS | Mexican Institute of Social Security, Instituto Mexicano del Seguro Social |
| ISSSTE | Institute of Social Security and Services for Government Workers, Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado |
| LAC | Latin America and the Caribbean |
| MDG | Millennium Development Goal |
| OECD | Organisation for Economic Co-operation and Development |
| PAC | Coverage Extension Program, Programa de Ampliación de Cobertura |
| PCS | Mobile Health Program, Programa Caravanas de Salud |
| PHI | Popular Health Insurance, Seguro Popular |
| REPS | Estate Regimes for Social Protection in Health, Regímenes Estatales para la Protección Social en Salud |
| SESAs | primary and secondary care facilities managed by the states |
| SINOS | individualized information system, Sistema de Informacima Nominalizado de Salud |
| SMNG | Health Insurance for a New Generation, Seguro Médico para una Nueva Generación |
| SPSS | Social Protection System in Health, Sistema de Protección Social en Salud |
| THE | Total Health Expenditure |

Executive Summary

This case study assesses key features and achievements of Mexico's Social Protection System in Health (Sistema de Protección Social en Salud, SPSS). It analyzes the contribution of this policy to the establishment and implementation of universal health coverage in the country. Mexico is a large, upper-middle-income country that has benefited from sustained economic growth in the last decade, but where poverty and socioeconomic inequalities remain an important challenge. Indeed, in the early 2000s, a large percentage of the population did not have access to health insurance, which is mostly provided by social security schemes.

In this context, in 2003, the government revised the General Health Law to create the SPSS and its main pillar, Popular Health Insurance (PHI). The objectives of this reform were to (a) increase funds to the public health system and decrease the inequities in public expenditures across public insurance schemes and states; (b) improve health outcomes, reduce out-of-pocket payments for health services, and provide protection against catastrophic health expenditure; and (c) reform the organization and functioning of the state health systems.

The PHI is open to all residents with no access to social security. It transformed the transfer of public resources from the federation to the states from historical budgets to insurance premiums and secured funds for these premiums. The reform eliminated user fees, and in principle was supposed to collect family contributions among those with the ability to pay, although in practice almost nobody pays. It also created explicit entitlements to SPSS affiliates and fully funded them. The PHI benefits package, known as the Universal Health Services Catalogue (Catálogo Universal de Servicios de Salud, CAUSES), was designed to include the most cost-effective interventions to treat and control the main causes of morbidity and hospitalization in the country. This package has been revised following predetermined criteria to include new interventions. Today, it includes 284 primary- and secondary-level interventions and 522 related pharmaceutical products. In addition, through the Fund against Catastrophic Health Expenditure, an additional 57 high-complexity interventions are also offered to affiliates.

The PHI expanded rapidly, particularly after 2010, to cover virtually all its target population, about 52 million people by February 2012. Total expenditure on health increased from 2.4 to 3.1 percent of gross domestic product (GDP) between 2000 and 2009. It also decreased the differential in public expenditure between those covered by social security and the uninsured and the differences across states. The PHI increased utilization of health services and decreased out-of-pocket expenditure and catastrophic health expenditures among its affiliates compared to the uninsured.

Despite these large successes, there are several challenges the health system faces. The large inequalities in health outcomes and health resources across Mexican states remain. The reform did not eliminate the fragmentation in the health system, which includes several health insurance schemes offering different benefits packages and having their own sources of funds, their own provider networks, and little communication among them. In addition, while the PHI decreased out-of-pocket expenditure among affiliates, overall they remain high, among the highest in upper-middle-income countries. Finally, although the SPSS aimed at separating financing and provision and creating provider payment mechanisms linked to production, there has not been much progress in this regard.

1. Introduction

Context

With a population of 113 million and a per-capita GDP of US\$10,064 (current U.S. dollars), Mexico is one of the largest and highest-income countries in Latin America and the Caribbean (LAC). The country has benefited from sustained economic growth during the last decade, which was temporarily interrupted by the financial and economic crisis. Real GDP is projected to grow 3.8 percent and 3.6 percent in 2012 and 2013, respectively (IMF 2012). Despite this growth, poverty in the country remains high, with half of the population living below the national poverty line.² The country is also highly heterogeneous, with large socioeconomic differences across states and across urban and rural areas. In 2010, while the extreme poverty ratio in the Federal District and the states of Colima and Nuevo León was below 3 percent, in Chiapas, Guerrero, and Oaxaca it was 25 percent or higher. These large regional differences are also found in other indicators of well-being, such as years of schooling, housing conditions, and access to social services.³

Infant and under-five mortality rates have decreased significantly over the years, and the country is on track to achieve the Millennium Development Goal (MDG) of reducing under-five mortality. In 2012, the infant mortality rate was estimated at 13.2 per 1,000 live births and the under-five mortality rate was estimated at 17.5 per 1,000.⁴ These rates are lower than the Latin America and the Caribbean regional average (16.2 and 19.1 per 1,000 respectively), but higher than the Organization for Economic Co-operation and Development (OECD) average (6.5 and 7.8 per 1,000).⁵ In the case of maternal mortality, the country has experienced significant improvements, but it is not likely to reach this MDG. Between 1990 and 2010, the maternal mortality ratio declined by 45 percent. By 2010, the ratio (50 per 100,000) was lower than the LAC region average, although it was higher than those in other OECD countries.⁶

With reductions in maternal and child mortality, and the control of communicable diseases, life expectancy in Mexico has largely increased in recent decades; in 2011, it was 73.2 years for men and 77.9 for women.⁷ As a result, the country has advanced in the demographic and epidemiological transition. The burden of disease for noncommunicable diseases is increasing quickly due to population aging and increased exposure to unhealthy diets, physical inactivity, tobacco use, and alcohol abuse. Diabetes and cardiovascular diseases are the main causes of death and disability in Mexico.

² However, the percentage of people living under US\$2 per day (Purchasing Power Parity) in 2008 was only 5 percent (World Databank, World Bank).

³ Consejo Nacional de Evaluación de la Política de Desarrollo Social, http://www.coneval.gob.mx/cmsconeval/rw/pages/medicion/pobreza_2010.es.do.

⁴ CONAPO, Basic Demographic Indicators, http://www.conapo.gob.mx/es/CONAPO/Indicadores_demograficos_basicos.

⁵ World Bank Development Data Platform, consulted on December 12, 2012.

⁶ World Health Organization, United Nations Population Fund, and the World Bank on Maternal Mortality Estimates for 2010 and OECD data.

⁷ CONAPO, Basic Demographic Indicators, http://www.conapo.gob.mx/es/CONAPO/Indicadores_demograficos_basicos.

Objective

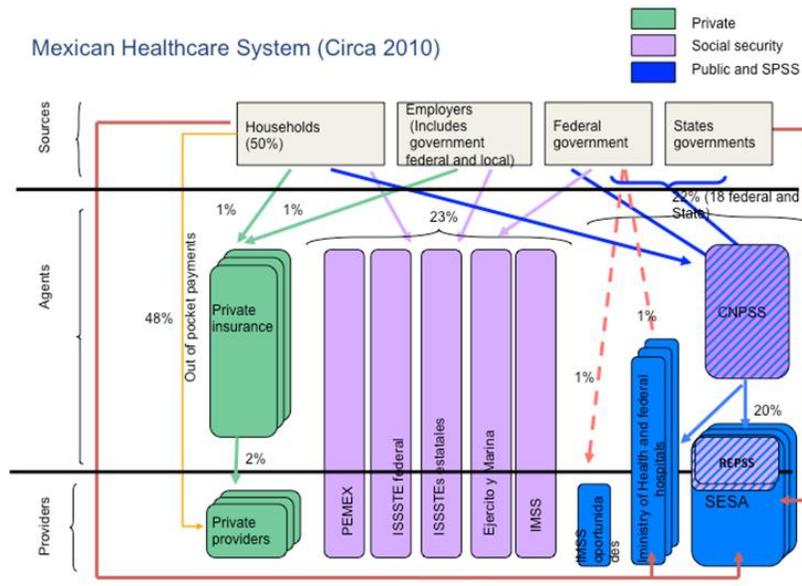
This case study assesses key features and achievements of the Social Protection System in Health (Sistema de Protección Social en Salud) in Mexico, and particularly of its main pillar, Popular Health Insurance (Seguro Popular, PHI). It analyzes the contribution of this policy to the establishment and implementation of universal health coverage in Mexico. In 2003, with the reform of the General Health Law, the PHI was institutionalized as a subsidized health insurance scheme open to the population not covered by the social security schemes. Today, the PHI covers all of its intended affiliates, about 52 million people.

2. General Health System Overview of Financing and Delivery

The Mexican health system comprises three subsystems: Social Security, the Social Protection System in Health (SPSS), and the private system. The social security schemes offer different services, including health insurance and pensions, for salaried workers in the formal sector of the economy. There are several social security schemes in Mexico, the most important of which are the Mexican Institute of Social Security (Instituto Mexicano del Seguro Social, IMSS), which insures about 42 million people; and the Institute of Social Security and Services for Government Workers (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, ISSSTE), which provides a similar package of services to federal and some state government employees and which insures about 6 million people.⁸ This subsystem is funded by payroll contributions from the federal government, employers, employees, and a subsidy from the state. Each social security scheme has its own network of health care providers; beneficiaries can receive services only from their respective scheme's providers. The publicly subsidized system, the SPSS, offers health insurance to all Mexicans not covered by any of the social security schemes. Services covered by the SPSS are mainly provided by the public health facility networks managed by the states. Finally, a small percentage of the population is covered by private health insurance schemes (figure 1). As will be detailed later, the three health insurance subsystems, Social Security, SPSS, and the private sector, function in parallel with little coordination among them.

⁸ In addition, there are other social insurance schemes such as the one serving workers of the oil company, PEMEX, and the ones serving the army and navy.

Figure 1 Mexico Health Care System: Sources of Funds, Agents, and Providers, 2010



Note: All data in relation to Total Health Spending, approximate numbers
 Source: Own elaboration. Data on spending from SINAIS.

Source: Aguilera 2012.

In terms of financing of the sector, about half of the health spending (which accounts for 6.5 percent of GDP) in Mexico is private, almost all out-of-pocket. Social Security represents 23 percent of the total expenditure and the publicly subsidized system about 22 percent (see figure 1). There is virtually a one-to-one relationship between financing agents and providers in the public health system in Mexico, since public schemes are vertically integrated: all social security institutions (the purple boxes in figure 1) combine payment (as agents) and provision, while, the institutions of the publicly subsidized scheme, the agents and providers, behave as if they were vertically integrated (the payers for the SPSS, the National Commission for the Social Protection in Health [Comisión Nacional de Protección Social en Salud, CNPSS], and the Estate Regimes for Social Protection in Health [Regímenes Estatales para la Protección Social en Salud, REPSS] in purple and blue with the providers in blue), although the regulatory framework allows some freedom to payers in the purchase of health care.

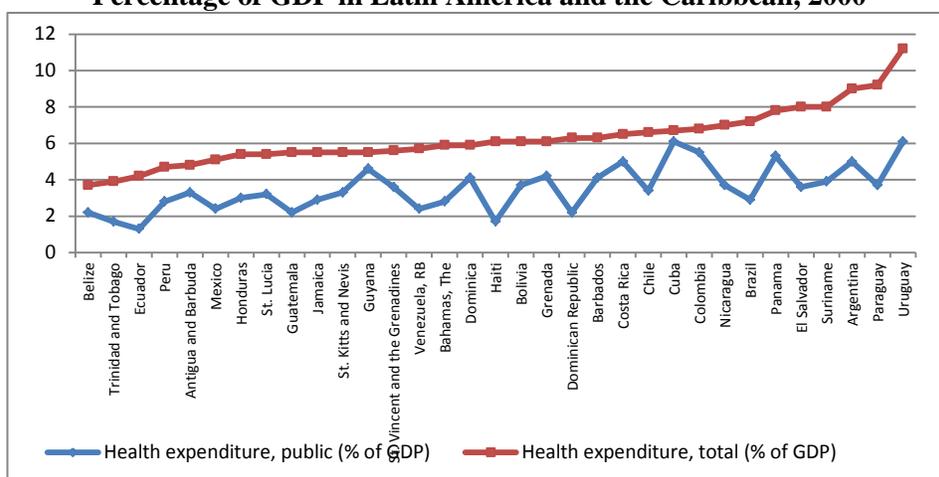
3. SPSS Institutional Architecture and Interaction with the Rest of the Health System

Context at the Time of the Reform that Created the SPSS

In the early 2000s, before the development of the SPSS, the uninsured had access to the services provided by the public health facility networks. These networks are managed by the states, with the exception of a few highly specialized hospitals that are under the management of the federal government. There was no explicit package of health services that the population was entitled to; in practice, the services provided were limited by the health budget allocations and the availability of health facilities and personnel.

The public health care system catering to the uninsured, more than half of the country's population, was underfunded. The system also had large inequalities in public expenditure across states and between those insured by the social security schemes (who also receive government subsidies) and the uninsured. In 2000, public expenditure on health was about 2.4 percent of GDP and total expenditure on health 5.1 percent of GDP, one of the lowest in LAC (figure 2). In addition, per-capita federal expenditure on health in the state with the highest level was six times higher than that in the state with the lowest level. Similarly, public expenditure on health for those covered by the social security schemes was twice as high as public expenditure on health for the uninsured (table 1). This large underfunding of the health system resulted in large household out-of-pocket payments for health care, representing about half of total expenditure on health, and also resulted in a large percentage of households incurring catastrophic health expenditures (Knaul et al. 2012).

Figure 2 Total Expenditure on Health and Public Expenditure on Health as Percentage of GDP in Latin America and the Caribbean, 2000



Source: World Bank, Development Data Bank.

Objectives of the Reform

Given this context, the Government of Mexico revised the General Health Law in 2003 to create the Social Protection System in Health and its main pillar, the Popular Health Insurance (PHI).⁹ The health reform had several objectives: (a) to increase funds to the public health system and decrease the inequities in public expenditures across subsystems and states, (b) to improve health outcomes and reduce out-of-pocket payments for health services and provide protection against catastrophic health expenditure, and (c) to reform the organization and functioning of the state health systems to ensure better management of PHI, and to establish incentives to promote equality, technical efficiency, and responsiveness (Kurowski et al. 2012).

⁹ Seguro Popular, or Popular Health Insurance, is also the trademark name of the entire Social Protection System in Health. However, in this case study we refer to the PHI as the part of the SSPS that offers a package of mainly primary and secondary health care services (CAUSES), and does not include the Fund for Protection against Catastrophic Health Expenditures.

Features of the Reform

The SPSS is composed of several pillars the main three of which are (a) the Popular Health Insurance (PHI), a subsidized health insurance scheme offering a package of mainly primary and secondary health care services to all Mexicans not covered by a social security scheme; (b) the Fund for Protection against Catastrophic Health Expenditure (FPGC), which offers PHI beneficiaries a package of high-complexity services that are deemed to result in catastrophic health expenditure; and (c) the Health Insurance for a New Generation (Seguro Médico para una Nueva Generación, SMNG), which offers a comprehensive package of services for children under five born after December 1, 2006.¹⁰ The SMNG currently works as a separate program with its own budget and at the moment is not included in the General Health Law. As mentioned, for the provision of services, the SPSS uses mainly the public provider network. This network is composed of primary and secondary care facilities managed by the states (SESAs) and secondary and tertiary care facilities managed by the Federal Health Secretariat (Secretaría de Salud).

Financing: The SPSS, and particularly the PHI, replaced historical budgets of the public health sector with actuarially calculated premiums (World Bank 2010a). Before the reform, the budget for the health sector was based on the budget for previous years, adjusted for inflation. The allocation for each state was based on the number of infrastructure and health care personnel in the state at the moment of the decentralization of the system in late 1990s, adjusted for mortality levels and indexed by inflation. This system perpetuated the underfunding of the system and the large disparities in federal expenditure across states, since the states with larger infrastructure received more funds without regard to population needs. The reform addressed these weaknesses; the funding is now based on actuarially calculated premiums and the transfers to the states are adjusted with the aim of decreasing previous inequalities. This reform changed the levels of resources transferred from the federal government to the states to finance their health systems. However, as will be discussed below, there has not been a significant change in the way the states use these resources to finance their health providers; with a few exceptions, the state providers continue to receive historical budgets.

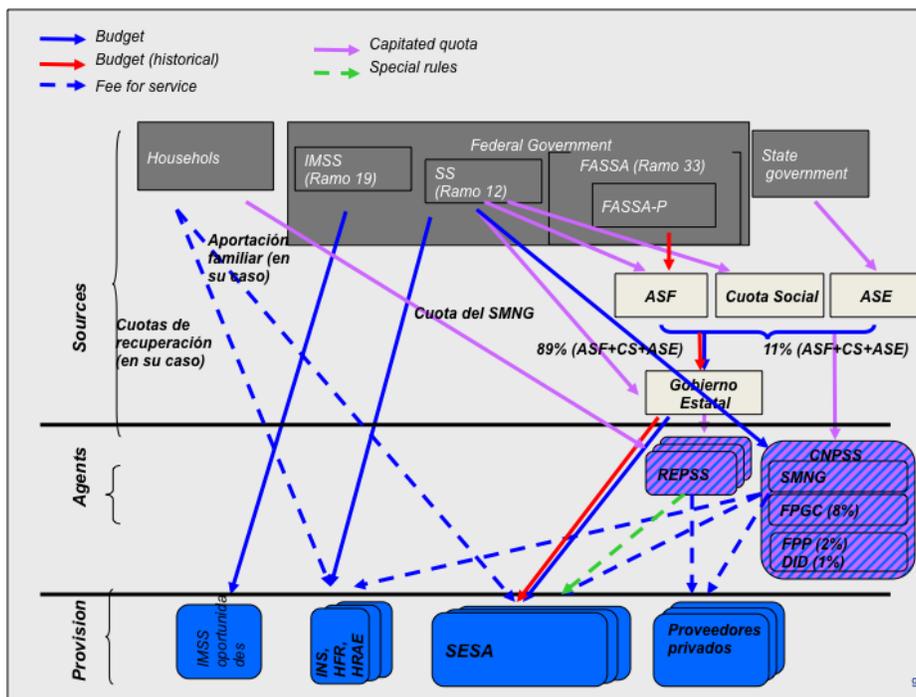
The SPSS is financed by the federal and state governments; all funds come from general government revenues (figure 3). The federal government makes two contributions, a “social contribution” (cuota social) and a “federal solidarity contribution” (aportación solidaria federal). The states make their own contribution known as the state solidarity contribution (aportación solidaria estatal). In principle, the SPSS should also be funded by household contributions of nonpoor families; in practice, however, very few households contribute.

The General Health Law establishes the PHI premium as a fixed share of all three federal and state contributions (currently 89 percent; the remaining resources finance the FPGC [8 percent] and trust funds for infrastructure investments [2 percent] and reserves [1 percent]). In the case of the SMNG, the federation transfers another per-capita amount. The federal resources that

¹⁰ The SPSS also includes the following programs: (a) the Healthy Pregnancy Strategy (Estrategia de Embarazo Saludable), which provides priority for pregnant women to affiliate in the PHI; and (b) the National Program for Mobile Surgery (Programa Nacional de Cirujía Extramuros), which offers general surgery, ophthalmology, orthopedic, and reconstructive surgery services to rural isolated communities through mobile teams; and (c) the health component of Oportunidades, the well-known conditional cash transfer program.

financed the PHI are transferred to the states to finance the provision of its package of services.

Figure 3 Financing of the SPSS, Mexico



Source: Aguilera 2012.

The law also sets forth the relative magnitude of the contributions. With the federally financed social contribution serving as the reference point, the federal solidarity contribution is set at 150 percent of the social contribution and the state solidarity contribution at 50 percent of the amount of the social contribution. The General Health Law provides for an adjustment of the premium by linking the social contribution to the minimum general salary of the Federal District. This salary, by law, is indexed to the inflation level. The social contribution corresponds to 3.92 percent of the minimum general salary of the Federal District. This funding mechanism has been entrenched in national legislation and is thus less vulnerable to budgetary variations.

The federal solidarity contribution that finances the PHI is not necessarily transferred fully to the states. If the total sum of this contribution is lower than the resources a state is already receiving from the federation (mainly through the so-called Ramo 33), the state does not receive additional funds. If the total sum is higher than the resources the state is already receiving, the federation transfers the difference. This mechanism was designed to reduce the existing inequalities in public expenditure on health across states.

The use of resources transferred to the states (89 percent of the funds that finance the SPSS) is normed: (a) a maximum of 40 percent of the transferred resources should finance the payroll; (b) up to 30 percent should pay for drugs for the PHI benefits package and diseases covered in the FPGC; (c) a minimum of 20 percent should pay for promotion, prevention, and disease detection activities included in the entitlements; and (d) up to 6 percent should pay for operating and administrative costs.

User fees: The reform eliminated user fees, although in principle it was supposed to include a family contribution for nonpoor households. With the elimination of user fees at the point of service, the reform aimed at eliminating financial barriers to accessing services, and was also aimed at decreasing catastrophic and impoverishing health care expenditure.

Entitlements: The reform also created explicit entitlements to the SPSS affiliates. Before the reform, it was not clear what services the uninsured could receive in public health care facilities. In practice, the services they received were largely limited by the available funds in the system. The reform changed this, by explicitly defining the affiliates' entitlements and fully funding them. These entitlements are disclosed in a letter to each beneficiary with the insurance policy.

The SPSS guarantees to its affiliates three defined packages of health services free of cost at the point of provision. The PHI covers 284 primary and secondary care interventions (a package of services known as the Universal Health Services Catalogue (Catálogo Universal de Servicios de Salud, CAUSES); the FPGC covers 57 interventions associated to catastrophic spending (mainly high-complexity interventions and antiretroviral drugs for HIV/AIDS patients); and the SMPG covers any other service not covered by CAUSES and FPGC for children born after December 1, 2006, and until they reach 5 years of age.

Management of the SPSS: The SPSS is managed by the National Commission for the Social Protection in Health (Comisión Nacional de Protección Social en Salud, CNPSS) and its state-level offices, the Estate Regimes for Social Protection in Health (Regímenes Estatales para la Protección Social en Salud, REPSS), which function as fund holders for the SPSS. As an agency of the Ministry of Health, the CNPSS reports directly to the Minister of Health, although often the head of the CNPSS (the commissioner) reports directly to the president of the country.

The CNPSS has three main functions: (a) to calculate per-capita transfers to the states for coverage of the CAUSES and of the SMNG and transfer the funds for the CAUSES to the states; (b) to pay providers directly for the interventions included in the FPGC and third-level care covered by the SMNG; and (c) to coordinate its actions with several other programs within the Ministry of Health (see the Annex for a description of existing public health and primary health care programs).

Organizational changes: The reform envisioned a separation between financing and provision and new provider payment mechanisms that would facilitate the portability of insurance across states and across insurance schemes, allowing in this way the functional integration of provider networks. As will be detailed in the last section, there has been no significant progress in this objective of the reform (Kurowski and Villar-Uribe 2012).

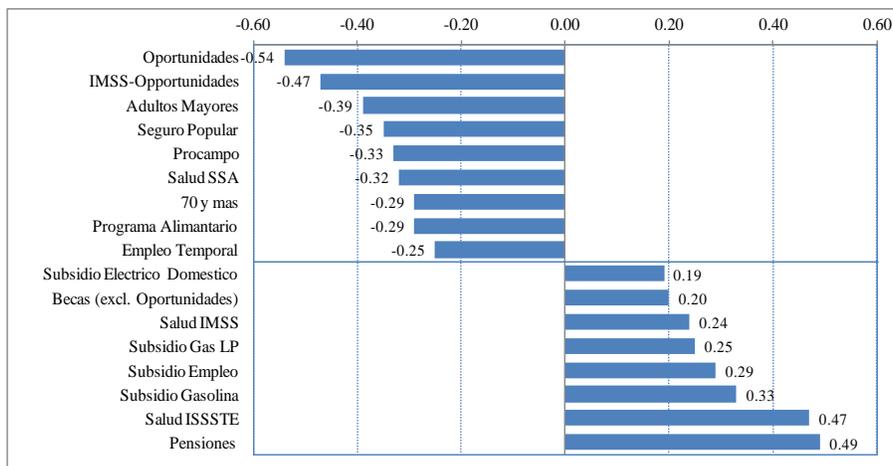
Nevertheless, there were some organizational changes introduced by the SPSS. First, providers need to be accredited to provide services to SPSS affiliates. In practice, however, some providers are still not accredited. Second, in the case of the FPGC, there is a clear separation of financing and provision. For the services covered by the FPGC, providers are paid prospectively. In contrast to the PHI, which is managed by the states, the FPGC is managed by the federation through the CNPSS. For the high-complexity services covered by the FPGC, the CNPSS pays providers, including Social Security, other public, and private providers a predetermined fee.

This payment schedule is based on an estimate, based on aggregate data, of direct and in some cases indirect costs of the services included. In contrast, in the case of the PHI, the additional resources injected by the reform in general are not used to pay health facilities based on production or performance, but as additional budget transfers. Currently, both the REPSS and the SESAs health delivery networks are under the responsibility of the state Ministry of Health.

4. Targeting, Identification, and Enrolment of Beneficiaries

The SPSS is open to any resident of Mexico without social security. The targeting of this policy was not explicitly based on household income, although those without social security tend to be poorer than those with it. As a result, the SPSS is among the most progressive social programs in Mexico. As shown in figure 4, the benefits of public expenditure on the PHI concentrate among families at the poorest end of the income distribution. The public expenditure concentration ratio of PHI is -0.35, one of the most progressive social programs after Oportunidades and IMSS-Oportunidades, which is also a strategy the country uses to provide health services to poor isolated communities (see figure 4).

Figure 4 Concentration Coefficients for Selected Social Programs, Mexico, 2010



Source: CONEVAL 2011 from Scott 2011.

Although SPSS affiliation is not based on household socioeconomic level, in principle, household contributions are. According to current norms, families in deciles 1 to 4 of the income distribution and families until the 7th decile with pregnant women or children under 5 years of age are exempt from contributing to the SPSS. In practice, very few pay these contributions; less than 1 percent paid by the end of 2011 (Knaul et al. 2012). To determine who should pay, during the affiliation process a survey instrument is applied to all families to determine their socioeconomic level. The survey, called the Household Socioeconomic Characteristic Document (Cédula de Características Socioeconómicas del Hogar), is used to collect sociodemographic information of the potential affiliates and, based on this, to estimate the family contribution to health insurance. The instrument is different from the one used by the Social Development Secretariat (*Secretaría de Desarrollo Social*), called the Unique Questionnaire of Socioeconomic Information (Cuestionario Único de Información Socioeconómica), which is the one used for the targeting of the social benefits provided to poor families by the Ministry of Social Development, including Oportunidades.

Enrollment is made by the REPSS. The REPSS and the CNPSS annually agree on a target number of families to be affiliated; this was the basis for the transfer of federal resources to the states before reaching full coverage. As a result, there was no incentive for the REPSS to collect household contributions since this might reduce households' incentives to enroll. The REPSS are also in charge of managing the resources transferred from the federation to the states, classifying families according to socioeconomic level and collecting the family quota (contribution) for the SPSS.

5. Management of the HCP's Benefits Package

The SPSS guarantees a package of benefits free of cost at the point of service for affiliates. There are three benefits packages, one for the PHI, one for the FPGC, and one for the SMNG. The body responsible for deciding which interventions to include varies by benefits package. The CNPSS is responsible for CAUSES (the PHI benefits package), and there are two agencies and two steps in the FPGC decision-making process. First, the General Health Council (Consejo de Salubridad General) decides the diseases that are catastrophic in nature.¹¹ Once the General Health Council lists the diseases that are considered catastrophic, the CNPSS proposes their inclusion in the benefits package, and the Technical Committee of the Fund decides which services and costs will be covered for these diseases.

The criteria to include an intervention in the package are (a) cost-effectiveness, (b) affordability, (c) financial protection, (d) opinion of the scientific community, (e) demand and supply, and (f) social acceptance.

The first benefits package of the PHI included only 78 interventions, which were selected based on a burden of disease study developed by the federal Ministry of Health and FUNSALUD (a private health think tank). The interventions selected were those most cost-effective to treat and to control the main causes of morbidity in the country and the main causes of hospitalization. In addition, these were interventions already included in national health programs and were part of the norms at the time (Secretaría de Salud 2009). The costing of the package included both a micro and a macro costing (Giedion, Panopoulou, and Gómez-Fraga 2009).

In the first case, this included a detailed analysis of the production function of each of the interventions, including all the needed inputs and all the diagnostic and medical procedures each one might include. In the second case, the costing started from a budget ceiling. Based on the total number of potential affiliates and the potential demand for the health services included, an average cost per intervention was estimated. The annual sum of the average cost of the interventions included could not add more than the budget ceiling. This original costing was revised in 2006–07 when the per-capita cost was adjusted. Today, the benefits package includes 284 primary- and secondary-level interventions, including 522 pharmaceutical products.

¹¹ The General Health Council is the highest health authority in the country and is directly accountable to the President of Mexico. The Council is composed of a president, who is always the Minister of Health; a secretary; and 13 members, two of whom are the president of the Mexican Academy of Medicine and the president of the Mexican Academy of Surgery. The members are appointed by the President of Mexico and all should be health specialists.

6. The Information Environment of the Health Coverage Program

There are several information systems within the SPSS. First, the SPSS collects survey-based and administrative information from affiliates. The Household Socioeconomic Characteristics Document allows program administrators to collect affiliates' sociodemographic information. In addition, the CNPSS has developed a new individualized information system (Sistema de Información Nominalizado de Salud, SINOS). This new system has three modules the first one of which collects the fingerprints of all SPSS affiliates. There is no unique identifier of affiliates of different social programs in Mexico. Through the collection of fingerprints, the CNPSS aims to generate this identifier for SPSS and Oportunidades beneficiaries. A second module, called Consulta Segura, aims to generate a health risk management system. This module collects information on health risk factors of all affiliates. Based on this information, the program will generate different health management procedures for its affiliates. The final module is, for the moment, mandatory only for Oportunidades beneficiaries. This module collects information on the health services provided.

Currently, there are no clear incentives for the states or providers to improve health care performance. Although this was one of the objectives of the 2003 reform, there has not been much progress in this regard (Kurowski and Villar-Urbe 2012). In general, provider payments continue to be based on historical budgets and not linked to performance. The CNPSS is, however, evaluating options to use the existing information systems, including SINOS, as the basis for a system to generate these incentives.

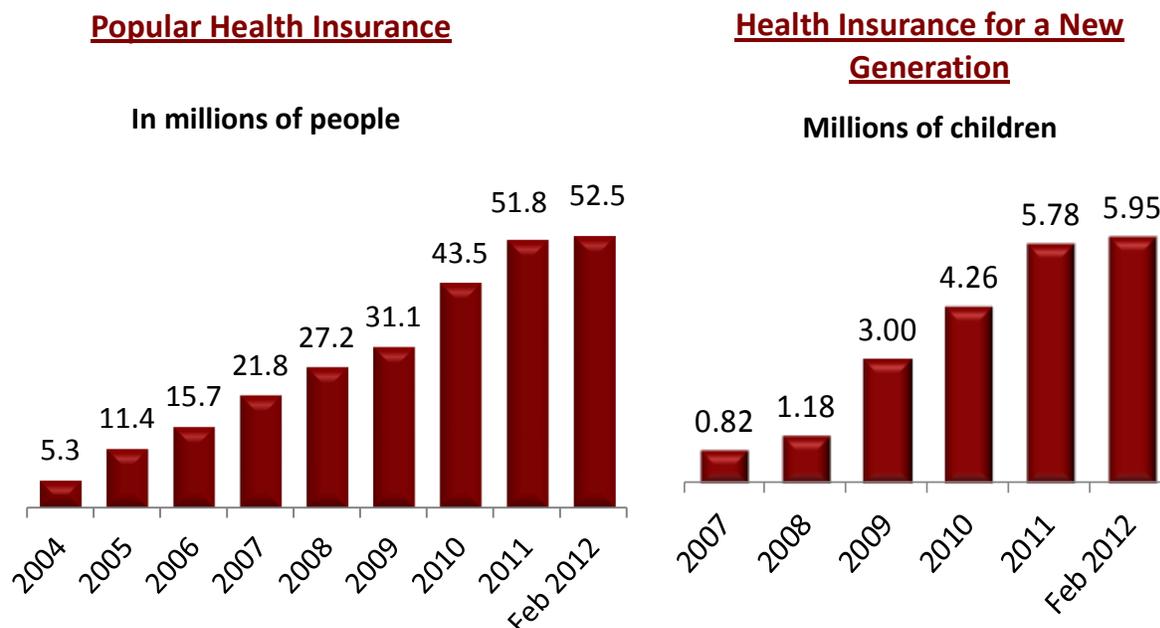
In addition to the SPSS's own information systems, the Ministry of Health collects information on consultations, hospital discharge data, and facility characteristics (infrastructure, physical resources, and so forth), and quality (accreditation status, infection rates, and so forth) for the SESA system and the group of hospitals managed by the Ministry of Health.

The development of administrative data to better assess provider performance under the SPSS is an area of opportunity. Data on technical quality and/or output volume information and case mix of hospitals can be constructed using the hospital discharge data system already in place. The development of cost information systems needs a comprehensive effort to implement financial accounting—financial statements, balance sheets, and “virtual invoices” for each patient—in health care units. Health care facilities are not currently capable of providing this information.

7. Discussion of One Theme Specific to Mexico

The health reform, initiated with the amendment to the General Health Law and the institutionalization of the PHI in 2003, has achieved most of its original goals. The PHI expanded rapidly, particularly after 2010, to cover virtually all its target population, about 52 million people who were previously uninsured, and the SMNG covered 5.95 million children by February 2012 (figure 5).

Figure 5 Trends in Affiliation to the Popular Health Insurance and Health Insurance for a New Generation



Source: CNPSS 2012.

As foreseen by the reformers, total expenditure on health increased by more than 1 percent of GDP between 2000 and 2010. Most of this increase was due to large increases in public expenditure on health, which grew from 2.4 percent to 3.1 percent of GDP between 2000 and 2009. It also decreased the differential in public expenditure between those covered by formal insurance schemes and the uninsured (the ratio dropped from 2.1. to 1.2) and the differences across states (table 1).

Table 1 Evolution of Fiscal Imbalances in the Health sector

| | 2000 | 2004 | 2010 |
|--|------------|------------|------------|
| Health Expenditure as Percentage of GDP | 5.1 | 6.0 | 6.3 |
| Public Expenditure as Percentage of GDP | 2.4 | 2.7 | 3.1 (2009) |
| Ratio of Per-person Public Expenditure between those Covered by Social Security Schemes and those Without | 2.1 to 1.0 | 2.1 to 1.0 | 1.2 to 1.0 |
| Ratio of Federal Per-head Expenditure on Health in States with the Highest Figure to those in States with the Lowest | 6.1 to 1.0 | 4.3 to 1.0 | 3.0 to 1.0 |

Sources: Knaul et al. 2012 and World Bank Development DataBank for public expenditure as percentage of GDP.

Health Care Utilization

Data from the 2006 Mexican National Health and Nutrition Survey (ENSANUT) database show that PHI affiliates have a higher probability of service use, conditional on service need, than did the uninsured (Knaul et al. 2012). Data from the National Survey of Household Income and Expenditure 2008 show a similar pattern (table 2). Table 2 shows the percentage of households with different insurance schemes that had a member with a condition that prevented him or her from carrying out activities of daily living and that seek care. As table 2 shows, households insured by SPSS were more likely to utilize health services than those without health insurance, but less likely to do so than social security households.

Table 2 Utilization of Health Services when Ill – SPSS, Uninsured, and Social Security Households

| | SPSS | Uninsured | SPSS –Uninsured | SPSS and Uninsured |
|---------------------------|-------------|------------------------|-------------------------------|---------------------------------|
| Coverage (%) ² | 94.3 | 92.5 | *1.8 (p=0.058) | 93.3 |
| | SPSS | Social Security | SPSS – Social Security | SPSS and Social Security |
| Coverage (%) ² | 94.3 | 97.1 | ** -2.9 (p=0.000) | 96.3 |

Source: Kurowski and Ortiz 2012.

Note: Illness: Households with at least one member having a condition that prevented him or her from carrying out activities of daily living (ADLs).

Coverage: Households with at least one member having a condition that prevented him or her from carrying out ADLs and seeking care among households with at least one member having a condition that prevented him or her from carrying out ADLs.

*p<0.1, **p<0.01.

Financial Protection

A 2012 study using the National Survey of Household Income and Expenditure 2008 (Kurowski and Ortiz 2012), found that when controlling for household characteristics associated with SPSS affiliation,¹² SPSS households had significantly lower out-of-pocket expenditure than uninsured households but expenditures similar to those of social security households (table 3). The same study also found that when controlling for household characteristics associated with SPSS affiliation, SPSS households showed a significantly lower incidence of catastrophic health expenditure than uninsured households, and no significant differences between SPSS households and insured households (table 4).

¹² The study used propensity score matching to compare households (and thus control for differences among population groups) with at least one member with SPSS affiliation and no member with any other insurance coverage, households with at least one member with social security affiliation and no member with any other coverage, and households with no member insured.

Table 3 Annual Out-of-Pocket Expenditure for Matched Pairs – SPSS, Uninsured, and Social Security

| SPSS | Uninsured | SPSS – Uninsured |
|-------|-----------------|------------------------|
| 1,493 | 2,043 | *-550 p = 0.03 |
| SPSS | Social Security | SPSS – Social Security |
| 1,485 | 1,654 | -168 p = 0.73 |

Source: Kurowski and Ortiz 2012.

Note: *p<0.05.

Table 4 Incidence of Catastrophic Expenditure for Matched Pairs – SPSS, Uninsured, and Social Security Households

| | SPSS | Uninsured | SPSS – Uninsured |
|-------------------------|------|-----------------|------------------------|
| CAT 30 (%) ^a | 4.1 | 4.8 | **-.0.7 P<0.05 |
| CAT 20 (%) ^b | 6.0 | 7.0 | **-.1.0 P = 0.02 |
| CAT 10 (%) ^c | 10.6 | 12.8 | ***-2.1 P = 0.00 |
| | SPSS | Social Security | SPSS – Social Security |
| CAT 30 (%) ^a | 4.1 | 3.8 | 0.3 P = 0.52 |
| CAT 20 (%) ^b | 6.0 | 6.2 | -0.2 P = 0.76 |
| CAT 10 (%) ^c | 10.6 | 9.1 | *1.6 P = 0.08 |

Source: Kurowski and Ortiz 2012.

a. Households with catastrophic expenditure higher than 30 percent of disposable income.

b. Households with catastrophic expenditure higher than 20 percent of disposable income.

c. Households with catastrophic expenditure higher than 10 percent of disposable income.

*p<0.1, ** p<0.05, ***p<0.01.

CAT = catastrophic.

Impact on Formality of the Labor Market

The PHI provides health benefits that are higher than those originally offered by the National Health System and that are closer to those offered by the contributory social security regime for formal workers affiliated to the IMSS. Bringing the benefits of the subsidized regime closer to those of the contributory regime could, however, create an incentive for firms and individuals to choose labor market informality, thereby decreasing IMSS affiliation and increasing Seguro Popular's. In the last few years, several studies have aimed at estimating this impact, finding an impact but one that is smaller than originally thought, particularly when compared to the positive impacts the PHI has had on insurance coverage, utilization of services, and financial protection.¹³

¹³ Mexico's System of Social Protection in Health and the Formal Sector. Seminar that took place at the World Bank, Washington, DC; June 1, 2012.

In addition, one of these studies found evidence that seems to indicate that families see SPSS enrolment as a complement to social security enrolment and not as a substitute (Kurowski and Villar 2012). It found that the highest drop in the probability of enrolling in social security takes place among household members that are not covered through the social security membership of the head of household or her spouse (Aterido et al. 2011). These household members, by dropping out of social security and enrolling in the SPSS, provide the entire household with SPSS coverage, since it also extends to parents of the head of household and spouse and to economic dependents living in the home (Kurowski and Villar 2012).

8. Pending Agenda

Despite the large successes of the SPSS, there are several challenges the health system in general faces to improve health outcomes, reduce inequalities, and improve financial protection against catastrophic health expenditure.

Inequalities in Outcomes and Health Care Resources across States

Despite all efforts to increase the supply of health services and eliminate financial and other barriers to access, large inequalities in health care outcomes and in health resources across the states remain. This is due to both the large inequalities that existed at the start of the reform and the large socioeconomic differences across states that go beyond the health sector. For instance, while the infant mortality rate in the state of Nuevo Leon is estimated at 9.4 per 1,000 live births in 2012, it is 18.6 in Guerrero.¹⁴ Similarly, in 2008, while maternal mortality in Tlaxcala was 27 per 100,000 live births, in Oaxaca it was 98.7.¹⁵ There are also large differences in the distribution of health resources across states. In 2008, there were 312 doctors per 100,000 people in the Federal District but only 94 in Chiapas.¹⁶ Despite all this, the SPSS has significantly increased the number of doctors, nurses, and hospital beds available in the public health care delivery network (see Knaul et al. 2012).

Fragmentation of the Health Care System

The SPSS, particularly PHI, was successful in rapidly enrolling affiliates but did not eliminate the fragmentation of the Mexican health system, which includes several health insurance schemes covering formal workers, the SPSS, and the private sector. These systems have their own sources of funds and their own provider networks with little communication among them. Each scheme has its own funding sources, insurance pools, administrative structures, financial reserves, and service provider networks, resulting in large inefficiencies. There is little functional integration and coordination across these subsystems, since affiliates are limited to services provided by their scheme's own network. In 2011, health administration and insurance costs in Mexico represented an estimated 10.8 percent of total expenditure on health, the highest of OECD countries.¹⁷ There is currently a public debate in Mexico concerning ways to achieve the

¹⁴ Data from the Consejo Nacional de Población (CONAPO).

¹⁵ Data from the Sistema Nacional de Información (SINAIS).

¹⁶ Health Proposal of the National Council for Social Development Policy Evaluation (Consejo Nacional de Evaluación de la Política de Desarrollo Social).

¹⁷ See Ribe et al. 2012, and http://stats.oecd.org/index.aspx?DataSetCode=HEALTH_STAT.

functional integration of the system (including the creation of a unified system funded by general taxation) and to eliminate the inefficiencies the existing fragmentation creates.

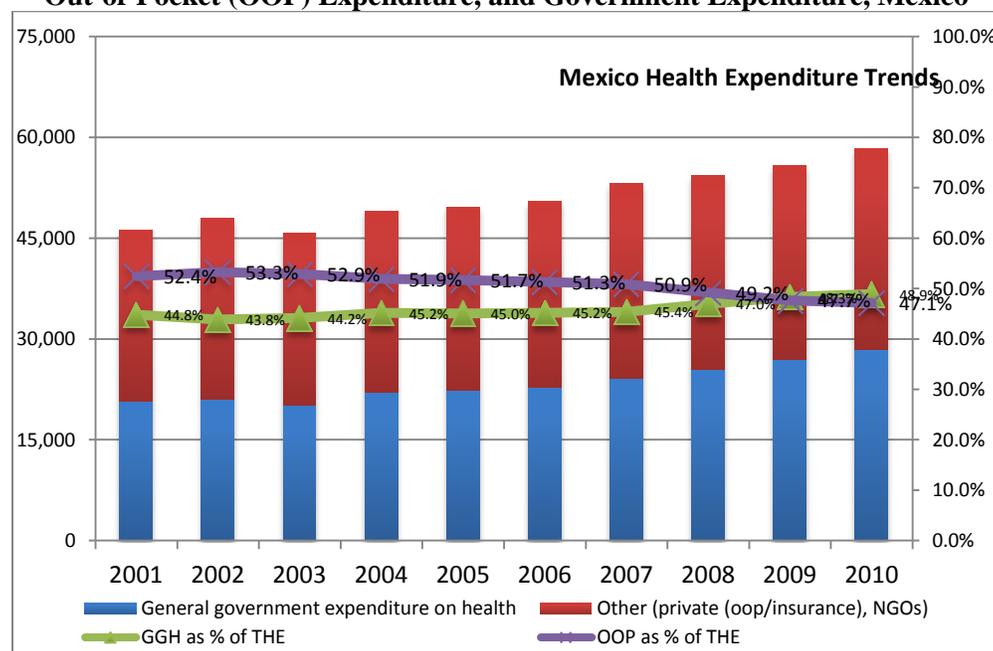
Inequalities in Entitlements between those Insured by Social Security and those Insured by the SPSS

The fragmentation of the health system also results in inequalities, since subsystems offer different packages of services. For example, the IMSS and ISSSTE health insurance schemes cover services at all levels of care, although their entitlements are not fully explicit, while the SPSS covers primary and secondary care and a limited set of high-complexity health services. The quality of the services provided by each scheme also varies. For example, in 2000, before introduction of the SPSS, the maternal mortality rate was nearly three times as high among those with access only to the public health care service system as among those with contributory social health insurance (OECD 2005).

Financial Protection against Catastrophic and Impoverishing Expenditure

As discussed, the SPSS significantly decreased out-of-pocket and catastrophic health expenditure among its affiliates. However, overall out-of-pocket expenditures remain very high—among the highest among upper-middle-income countries (World Bank 2010b)—financing about half of total health expenditure. Similarly, catastrophic expenditure in the country remains high (figure 6).

Figure 6 Trends in Total Health Expenditure (THE), Government Health Expenditure, Out-of-Pocket (OOP) Expenditure, and Government Expenditure, Mexico



Source: WHO GHED - GGHE/Other in 2005 constant US\$, annualized growth rates calculated using least squares growth rate method.

Lack of Incentives to Increase Production and Improve Quality of Services

With the exception of the FPGC, provider payment mechanisms remain delinked with service production. This lack of incentives to increase production and quality of services could reflect weaknesses in the incentive structure and accountability mechanisms imbedded in the relationship between state and federal governments within the SPSS. For instance, the federal government has not enforced state compliance with some of their responsibilities, such as the use of SPSS resources exclusively for accredited provider units or the collection of household contributions to PHI (Kurowski and Villar-Urbe 2012). In addition, while most of their resources come from the federal government, states have almost complete autonomy over the use of these resources. Thus, by replacing historical budget allocation with a premium based on the number of affiliates, the PHI gave incentives to states to enroll new affiliates, but did not necessarily provide incentives for effective service delivery.

Potential Inefficiencies caused by Internal Organization and Functioning of the SPSS and the Social Security Schemes

The internal organization and functioning of the SPSS and the social security schemes can potentially generate inefficiencies. The health insurance schemes integrate financing and service provision. Together with provider payments mechanisms unrelated to production, this can result in inefficiencies, because strategic purchasing of services (the option to decide what to buy, how often, and from whom¹⁸) is precluded. The government, aware of this issue, has deployed important efforts to reorganize the systems, particularly in the case of the SPSS. However, progress has been limited. The reform was not able to significantly change the internal organization and functioning of the SESAs (Kuroswki and Villar-Urbe 2012). Although there has been progress in some of the states, in general the insurance function has not been fully developed. The SESAs remain vertically integrated, that is, they still combine the financing and provision functions. Although REPSS were created in the states, in general they do not function independently from the state Ministry of Health, which also manages the state provider networks. In addition, provider payments have largely remained unchanged at least in the case of the PHI.

¹⁸ See Ribe, Robalino, and Walker 2012. Strategic purchasing is the option to decide what, how, and from whom to contract the provision of services (Busse and others 2007).

Annex 1. Brief Description of Public Health, Primary Care, and Key Supply-side Efforts

Mexico has an explicit policy on public and primary health care, with specific budgets and programs. There is special emphasis on maternal and child health, HIV/AIDS, and other diseases, such as TB (Secretarías de Salud, 2011). The country has progressed significantly in its path to achieve the health-related Millennium Development Goals (MDGs). Mexico is on the path to reach all of these goals with the exceptions of the goals related to maternal mortality and the spread of HIV/AIDS. Although there have been improvements in the two areas, the progress made is not enough to reach the goals (Gobierno de México y ONU México 2010). In the case of all other MDGs, Mexico has either reached them, as in the case of the MDGs related to child malnutrition, malaria, and TB, or is close to meeting the goal, as in the case of child mortality (Gobierno de México y ONU México 2010).

The Government of Mexico has several strategies in place to reduce maternal mortality. As mentioned, this is one of the MDGs the country is not likely to achieve despite significant progress. Between 1990 and 2010, the maternal mortality ratio was reduced by 45 percent. By 2010, the ratio (50 per 100,000) was lower than the average in Latin America and the Caribbean (LAC) region, although it was higher than those prevalent in other OECD countries.¹⁹ Among the strategies in place to improve maternal health, Mexico has the following: (a) the Healthy Pregnancy Strategy, which gives priority to pregnant women to enroll with her family in the SPSS; (b) an agreement between social security schemes and the SPSS to provide emergency obstetric care to all women regardless of her insurance policy; and (c) the Mobile Health Program (Programa Caravanas de Salud, PCS) which works closely with midwives in rural communities to ensure emergency obstetric care is provided when needed.

The prevalence of HIV/AIDS in Mexico is relatively low at 0.38 per 100 adults aged 15 to 49. The government has an intensive health promotion and preventive strategy and has ensured the free and universal access to antiretroviral drugs to HIV/AIDS patients through the FPGC.

One of the main challenges Mexico faces is being able to provide continuous health care services to the population living in rural isolated communities. The country has designed different programs to reach these communities through both supply- and demand-side efforts. On the supply side and funded with general revenues, there are a few major programs currently in operation: IMSS-Oportunidades, PCS, and the National Program for Extramural Surgery. On the demand side, Mexico developed the conditional cash transfer program, Oportunidades (previously Progresa).

IMSS-Oportunidades offers primary and secondary care services to more than 11 million people in rural and isolated communities. Managed centrally by IMSS, this was an effort to expand the health delivery network. The PCS, which is a new federal program (started in 2007), caters to marginalized and isolated rural locations where the population does not have regular access to health services. Via mobile health care units, it reaches 3.9 million people in the poorest localities. The mobile units visit each locality at least once a month. The PCS coexists with the Coverage Extension Program (Programa de Ampliación de Cobertura, PAC), which also uses mobile units, but this program is managed by SESAs.

¹⁹ World Health Organization, United Nations Population Fund, and the World Bank on Maternal Mortality Estimates for 2010 and OECD data.

In the case of Oportunidades, families receive a cash transfer when they comply with their responsibilities in terms of utilization of primary health care services and school attendance. The program currently covers almost 5.7 million families. The program successfully increased the poor's consumption and their school attendance and utilization of health services. Because of its demonstrated impacts on health, nutrition, and education indicators, the program has served as a model for numerous countries in the region and beyond.²⁰

Another strategy the country uses to reach poor and isolated communities is the Servicio Social Program. In Mexico, all students who have completed their undergraduate coursework, including physicians, are mandated to participate in this program (in Mexico, medical school is undergraduate). As part of this program, medical students spend one year in health care units, some of them in rural and poor locations. Wages are not high since they are performing a social service for the country.

With reductions in maternal and child mortality and the control of communicable diseases, life expectancy in Mexico has increased in recent decades; in 2011, it was 73.2 years for men and 77.9 for women.²¹ As a result, the country has advanced in the demographic and epidemiological transition. Its population is aging, and jointly with increasing exposure to unhealthy diets, physical inactivity, tobacco use, and alcohol abuse, noncommunicable diseases are increasing quickly. Diabetes and cardiovascular diseases are the main cause of death and disability in Mexico. To better prevent premature death and disability and control noncommunicable diseases, the country has started to implement several strategies at the population and clinical levels.

At the population level, the country has started to implement policies aimed at reducing health risk factors, particularly overweight and obesity (with 34.5 percent of women and 24.2 percent of men obese, Mexico has one of the highest percentages of overweight and obese adults of the OECD countries).²² Mexico also has a large percentage of overweight children—31 percent of children 7 to 17 [(OECD 2010)]. To deal with this problem, Mexico has banned the sale of unhealthy food in schools and has mandated physical activity classes. At the clinical level, the IMSS and ISSSTE have their own health risk management systems, PREVENIMSS and PREVENISSSTE. Currently, the SPSS is also implementing its own risk management system, Consulta Segura.

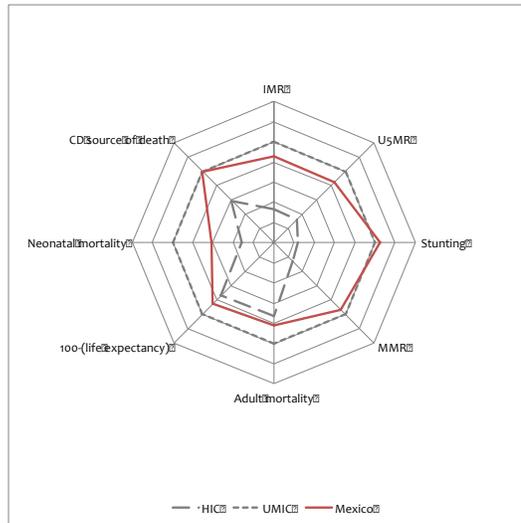
²⁰ The program and independent researchers undertook a series of rigorous impact evaluations, which demonstrated these impacts and shaped the program's design (www.oportunidades.gob.mx/evaluacion). Simulated reduction in poverty (measured with the minimum welfare line) is from Araujo and Sandoval [2012]).

²¹ Data from Consejo Nacional de Población (CONAPO).

²² Encuesta Nacional de Salud y Nutrición, México 2006.

Annex 2. Spider Web

I. Outcomes comparisons: Mexico and Upper Middle Income Countries



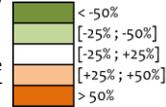
Note on interpretation:

In this plot 'higher' is 'worse' – since these indicators are positive measures of mortality / morbidity. Life expectancy is converted to be an inverse measure.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

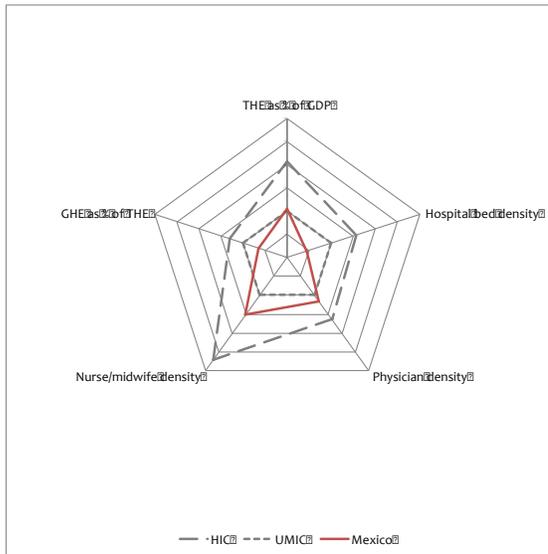
The table below summarizes outcome comparisons with the average upper middle income country (UMIC).

| Country Data | Mexico | UMIC | % Diff. |
|---------------------|--------|--------|---------|
| GNI pc (2000 USD) | 5666.4 | 1899.0 | 198.4% |
| IMR | 14.1 | 16.5 | -14.6% |
| U5MR | 16.7 | 19.6 | -15.0% |
| Stunting | 15.5 | 14.8 | 5.1% |
| MMR | 50.0 | 53.2 | -6.1% |
| Adult Mortality | 132.5 | 160.6 | -17.5% |
| 100-Life Expectancy | 23.3 | 27.2 | -14.2% |
| Neonatal Mortality | 7.0 | 11.4 | -38.6% |
| CD mortality | 22.0 | 22.0 | 0.0% |



IMR: Infant mortality rate (2010). U5MR: Under-5 mortality rate (2010). Stunting: prevalence of low height-for-age among children under 5 (2010). MMR: Maternal mortality rate (2010) per 100 000 live births. Adult mortality: Adult mortality rate per 1000 male adults (2010). [100-(life expectancy)]; Life expectancy at birth (2010) subtracted from maximum of 100. Neonatal mortality: Neonatal mortality per 1000 living births. CD as cause of death: Communicable diseases as cause of death (% total). All data from World Bank's World Development Indicators. Income averages for stunting calculated by Bank staff and are unweighted.

II. Inputs comparisons Mexico and Upper Middle Income Countries



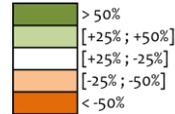
Note on interpretation:

This plot shows indicators which measure spending on health or the number of health workers per population.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

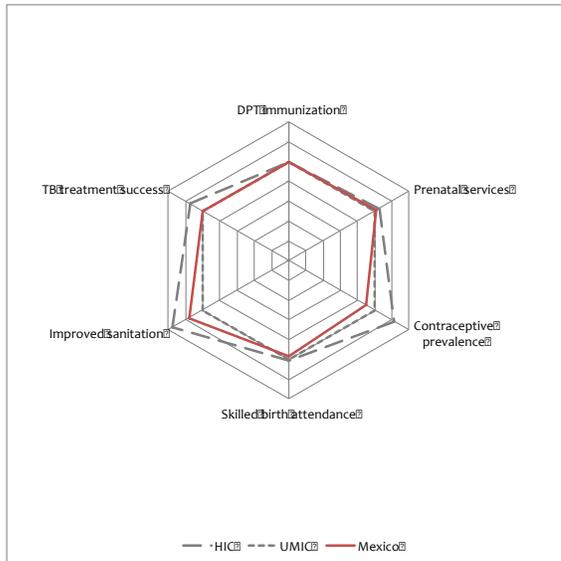
The table below summarizes inputs comparisons with the average upper middle income country (UMIC).

| Country Data | Mexico | UMIC | % Diff. |
|--------------------|--------|--------|---------|
| GNI pc (2000 USD) | 5666.4 | 1899.0 | 198.4% |
| THE %GDP | 6.5 | 6.1 | 5.9% |
| Hosp. bed density | 1.6 | 3.7 | -56.4% |
| Phys. density | 2.0 | 1.7 | 15.9% |
| Nur./midwife dens. | 4.0 | 2.6 | 52.6% |
| GHE %THE | 35.3 | 54.3 | -35.0% |



THE as % of GDP: Health expenditure, total (% of GDP) (2010). Hospital bed density: Hospital beds per 1,000 people (latest available year). Physician density: Physicians per 1,000 people (latest available year). Nurse/midwife density: Nurses and midwives per 1,000 people (latest available year). GHE as % of THE/10: Public health expenditure (% of total expenditure on health) (2010). All data from World Bank's World Development Indicators.

III. Coverage comparisons Mexico and Upper Middle Income Countries

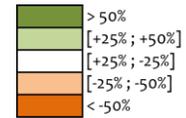


Note on interpretation:

In this plot 'higher' is 'better' – since these indicators are positive measures. In this case, all are percent of the population receiving or having access to a certain health related service.

The values on the radar plot have been standardized with respect to the average upper income country value.

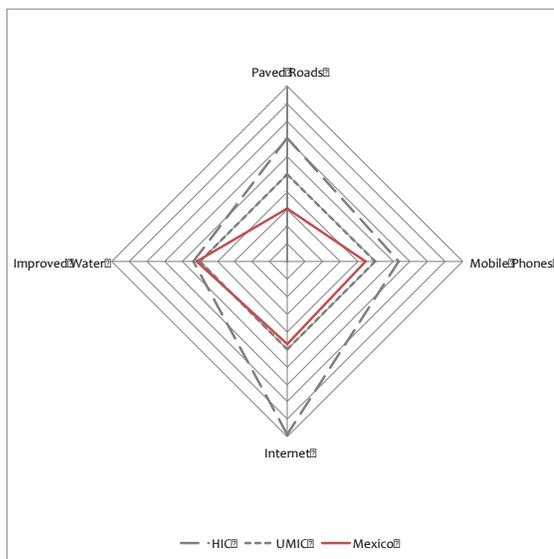
The table below summarizes coverage comparisons with the average upper middle income country (UMIC).



| Country Data | Mexico | UMIC | % Diff. |
|-------------------|--------|--------|---------|
| GNI pc (2000 USD) | 5666.4 | 1899.0 | 198.4% |
| DPT | 95.0 | 95.8 | -0.8% |
| Prenatal | 95.8 | 93.8 | 2.1% |
| Contraceptive | 72.9 | 80.5 | -9.5% |
| Skilled birth | 95.3 | 98.0 | -2.7% |
| Sanitation | 85.0 | 73.0 | 16.4% |
| TB success | 86.0 | 86.0 | 0.0% |

DPT immunization: % of children aged 12-23 months with DPT immunization (2010). Prenatal services: % of pregnant women receiving prenatal care (latest available year). Contraceptive prevalence: % of women ages 15-49 using contraception (latest available year). Skilled birth attendance: % of all births attended by skilled health staff (latest available year). Improved sanitation: % of population with access to improved sanitation facilities (2010). TB treatment success: Tuberculosis treatment success rate (% of registered cases). All data from World Bank's World Development Indicators.

IV. Infrastructure comparisons Mexico and Upper Middle Income Countries

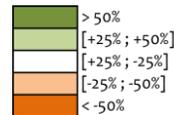


Note on interpretation:

In this plot 'higher' is 'better' – since these indicators are positive measures of provision of certain good / service, and a measure of urban development.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

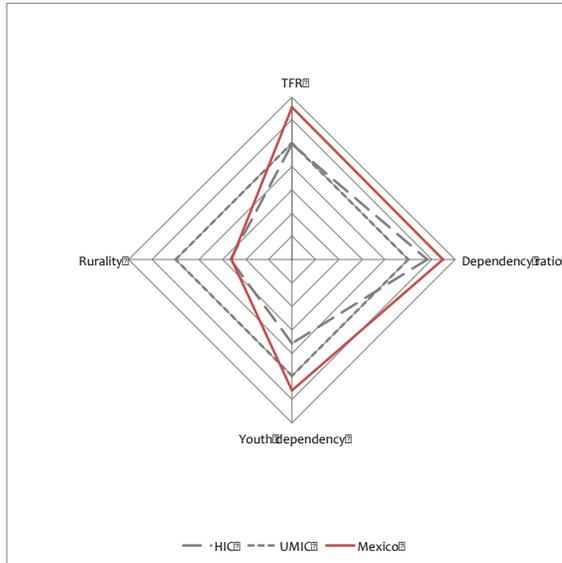
The table below summarizes infrastructure comparisons with the average upper middle income country (UMIC).



| Country Data | Mexico | UMIC | % Diff. |
|-------------------|--------|--------|---------|
| GNI pc (2000 USD) | 5666.4 | 1899.0 | 198.4% |
| Paved roads | 35.3 | 57.6 | -38.7% |
| Mobile phones | 82.4 | 92.3 | -10.8% |
| Internet | 36.2 | 38.3 | -5.7% |
| Water | 96.0 | 92.6 | 3.7% |

Paved roads: % of total roads paved (most recent). Internet users: users per 100 people (2010, with some estimates from prior years). Mobile phone users: mobile cellular subscriptions per 100 people (2010). Access to improved water: % of population with access to improved water source (2010). All data from World Bank's World Development Indicators.

V. Demography comparisons Mexico and Upper Middle Income Countries

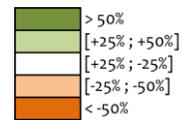


Note on interpretation:

Indicators here measure births per woman, the extent of rurality, and the number of dependents.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

The table below summarizes demographic indicators comparisons with the average upper middle income country (UMIC).



| Country Data | Mexico | UMIC | % Diff. |
|--------------------|--------|--------|---------|
| GNI pc (2000 USD) | 5666.4 | 1899.0 | 198.4% |
| TFR | 2.3 | 1.8 | 31.1% |
| Dependency (Total) | 54.9 | 42.2 | 29.9% |
| Youth share | 82.1 | 73.0 | 12.6% |
| Rural pop. | 22.2 | 42.6 | -47.8% |

TFR: total fertility rate (births per woman), 2009. Dependency ratio: % of working-age population (2010) aged less than 15 or more than 64. Youth dependency: % of working-age population (2010) aged less than 15. Rurality: % of total population in rural areas (2010). All data from World Bank's World Development Indicators.

References

- Aguilera, Nelly. 2012. "Gasto en salud en el marco de la cobertura universal." Mexico.
- Aterido, R., M. Hallward-Driemeier, and C. Pages. 2011. "Does Expanding Health Insurance Beyond Formal-Sector Workers Encourage Informality?: Measuring the Impact of Mexico's Seguro Popular." World Bank and Inter-American Development Bank Policy Research Working Paper 5785, Washington, DC.
- Bosch, M., M. B. Cobacho, and C. Pagés. 2011. "Taking Stock Eight Years after the Implementation of the Seguro Popular in Mexico." Inter-American Development Bank, Washington, DC.
- Busse, R., J. Figueras, R. Robinson, and E. Jakubowski. 2007. "Strategic Purchasing to Improve Health System Performance: Key Issues and International Trends." *Healthcare Papers* 8 (Sp): 62–76.
- Consejo Nacional de Evaluación de la Política de Desarrollo Social. http://www.coneval.gob.mx/cmsconeval/rw/pages/medicion/pobreza_2010.es.do.
- Frenk, Julio, Eduardo González-Pier, Octavio Gómez-Dantés, Miguel A. Lezana, and Felicia Marie Knaul. 2006. "Comprehensive Reform to Improve Health System Performance in Mexico." *The Lancet* 368 (9546): 1524–34.
- Gakidou, Emmanuela, Rafael Lozano, Eduardo González-Pier, Jesse Abbott-Klafer, Jeremy T. Barofsky, Chloe Bryson-Cahn, Dennis M. Feehan, Diana K. Lee, Hector Hernández-Llamas, and Christopher J. L. Murray. 2006. "Assessing the Effect of the 2001–06 Mexican Health Reform: An Interim Report." *The Lancet* 368 (9550): 1920–35.
- Giedion, U., G. Panopoulou, and S. Gómez-Fraga. 2009. "Diseño y ajuste de los planes explícitos de beneficios: el caso de Colombia y México." Comisión Económica para América Latina Serie Financiamiento del Desarrollo 219, México, D.F.
- Gobierno de México y ONU (Organización de las Naciones Unidas) México. 2010. "Los Objetivos de Desarrollo del Milenio: Informe de Avance." Gobierno de México y Organización de las Naciones Unidas México, México, D.F.
- IMF (International Monetary Fund). 2012. "Mexico Staff Report for the 2012 Article IV Consultation." IMF Report Number 12/316, International Monetary Fund, Washington, DC.
- Knaul, F., E. González-Pier, O. Gómez-Dantés, D. García-Junco, H. Arreola-Ornelas, M. Barraza-Llórens, R. Sandoval, F. Caballero, M. Hernández-Dávila, M. Juan D. Kershnerobich, G. Nigenda, E. Ruelas, J. Sepúlveda, R. Tapia, G. Soberón, S. Chertorivski, and J. Frenk. 2012. "The Quest for Universal Health Coverage: Achieving Social Protection for all in Mexico." *The Lancet* 380 (9840): 1259–79.
- Knaul, F., H. Arreola-Ornelas, O. Méndez-Carniado a, C. Bryson-Cahn, J. Barofsky, R. Maguire, M. Miranda, and S. Sesma. 2006. "Health System Reform in Mexico 4: Evidence is Good for your Health System: Policy Reform to Remedy Catastrophic and Impoverishing Health Spending in Mexico." *The Lancet* 368 (9549): 1828–41.

- Kurowski, C., and Luis Ortiz. 2012. “Mexico’s Social Protection System in Health and the Financial Protection of Citizens without Social Security.” World Bank, Washington, DC.
- Kurowski, C., and Manuela Villar-Urbe. 2012. “Mexico’s Social Protection in Health and the Transformation of State Health Systems.” World Bank, Washington, DC.
- Kurowski, C., M. Vilar-Compte, E. Correa Araujo, and A. Stanciole. 2012. “Mexico Social Protection System in Health and the Formal Sector.” World Bank, Washington, DC.
- OECD (Organisation for Economic Co-operation and Development). 2005. “OECD Reviews of Health Systems: Mexico.” Organisation for Economic Co-operation and Development, Paris.
- OECD (Organisation for Economic Co-operation and Development). 2010. “Obesity and the Economics of Prevention: Fit or Fat.” Document prepared by Franco Sassi. Organisation for Economic Co-operation and Development, Paris.
- Ribe, H., D. Robalino, and I. Walker. 2010. “Achieving Effective Social Protection for All in Latin America and the Caribbean: From Right to Reality.” World Bank, Washington, DC.
- Ribe, Helena, David A. Robalino, and Ian Walker. 2012. *From Right to Reality: Incentives, Labor Markets and the Challenge of Universal Social Protection in Latin America and the Caribbean*. World Bank: Washington, DC.
- Scott, John, CIDE (Centro de Investigación y Docencia Económicas), and CONEVAL (Consejo Nacional de Evaluación de Políticas de Desarrollo Social). 2011. “Gasto Público para la Equidad: Del Estado excluyente hacia un Estado de Bienestar Universal.” Serie *¿Gastamos para Mejorar?* México Evalúa Centro de Análisis de Políticas Públicas, Santa Catarina Coyoacán el Distrito Federal.
- Secretaría de Salud. 2007. “Programa Nacional de Salud 2007–2012. Por un México Sano: Construyendo Alianzas para una Mejor Salud.” Secretaría de Salud, México, D.F. http://portal.salud.gob.mx/descargas/pdf/pns_version_completa.pdf.
- Secretaría de Salud. 2008. “Reglamento de la Ley General en Salud en Materia de Protección Social en Salud.” *Diario Oficial de la Federación*, abril 2004, última reforma publicada en noviembre 2008. http://www.cndh.org.mx/sites/all/fuentes/documentos/Programas/VIH/Leyes%20y%20normas%20y%20reglamentos/Reglamento/Reg_LGS_Materia%20de%20Proteccion%20social%20en%20salud.pdf.
- Secretaría de Salud. 2008. “Reglas de Operación del Seguro Médico para una Nueva Generación.” *Diario Oficial de la Federación*, marzo. <http://www.asofis.org.mx/tabasco/marzo/seguo-medico.pdf>.
- Secretaría de Salud. 2009. Catálogo Universal de Servicios de Salud. Secretaría de Salud, México, D.F.
- Secretaría de Salud. 2010. “México: Hacia la Integración del Sistema Nacional de Salud.” Mimeo. México, D.F.
- Secretaría de Salud. 2011. “Rendición de Cuentas en Salud, 2010.” Secretaría de Salud, México, D.F.

World Bank. 2010a. "Project Appraisal Document for the Proposed Loan to Support the United Mexican States for the Social Protection System in Health Project." Report No. 52142-MX, World Bank, Washington, DC.

World Bank. 2010b. "Trends in Government and Health Financing in Mexico." World Bank, Washington, DC.



The World Bank supports the efforts of countries to share prosperity by transitioning toward universal health coverage (UHC) with the objectives of improving health outcomes, reducing the financial risks associated with ill health, and increasing equity. The Bank recognizes that there are many paths toward UHC and does not endorse a particular path or set of organizational or financial arrangements to reach it. Regardless of the path chosen, the quality of the instruments and institutions countries establish to implement UHC are essential to its success. Countries will face a variety of challenges during the implementation phase as they strive to expand health coverage. With that in mind, the World Bank launched the Universal Health Coverage Studies Series (UNICO Studies Series) to develop knowledge and operational tools designed to help countries tackle these implementation challenges in ways that are fiscally sustainable and that enhance equity and efficiency. The UNICO Studies Series consists of technical papers and country case studies that analyze different issues related to the challenges of UHC policy implementation.

The case studies in the series are based on the use of a standardized protocol to analyze the nuts and bolts of 27 programs in 25 countries that have expanded coverage from the bottom up, starting with the poor and vulnerable. The protocol consists of 300 questions designed to elicit a detailed understanding of how countries are implementing five sets of policies to accomplish the following:

- Manage the benefits package
- Manage processes to include the poor and vulnerable
- Nudge efficiency reforms to the provision of care
- Address new challenges in primary care and
- Tweak financing mechanisms to align the incentives of different stakeholders in the health sector

The UNICO Studies Series aims to provide UHC implementers with an expanded toolbox. The protocol, case studies and technical papers are being published as part of the Series. A comparative analysis of the case studies will be available in 2013.



THE WORLD BANK