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# HEALTH SYSTEM IN MEXICO Reforms, Transformations, and Challenges



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# HEALTH SYSTEM IN MEXICO Reforms, Transformations, and Challenges\*

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## List of abbreviations

ANC	Antenatal Care
СНС	Community Health Centre
CAUSES	Universal Health Services Catalogue
CINSHAE	National Commission for National Institutes of Health and High Specialty Hospitals
CNPSS	Commission for Social Protection in Health
COFEPRIS	Federal Commission for the Protection Against Sanitary Risks
COPLAMAR	General Coordination of the National Plan for Depressed Zones and Marginalised Groups
DGIS	General Directorate for Health Information
ENSANUT	National Health and Nutrition Survey
FFS	Fee for Service
FPGC	Protection Fund for Catastrophic Health Expenditures
GBD	Global Burden of Disease
IHME	Institute for Health Metrics and Evaluation
IMR	Infant Mortality Rate
IMSS	The Mexican Institute of Social Security
INSABI	The Institute of Health for Welfare
ISSSTE	Institute for Social Security and Services for State Workers
МоН	Ministry of Health
NCD	Non-Communicable Disease
NHS	National Health Service
NMR	Neonatal Mortality Rate
OECD	Organization for Economic Cooperation and Development
OOP	Out-of-Pocket
РАНО	Pan American Health Organization
РНС	Primary Health Care
REPSS	State Regimens for Social Protection in Health
SSA	Ministry of Health and Assistance
SPSS	System for Social Protection in Health
THE	Total Health Expenditure
U5MR	Under-Five Mortality Rate
UHC	Universal Health Coverage
UMIC	Upper-Middle-Income Countries
WHO	World Health Organization

### 1. Introduction

Mexico established health as a legal right in 1983, laying the foundation for universal health coverage. Despite being an upper-middle-income country, socio-economic disparities were rampant, and large proportions of its population did not have access to health insurance in the decades before 2000. Consequently, the country initiated reforms in the early 2000s to provide social protection to those employed in the informal sector and the poor and vulnerable, who constitute about half its population. Mexico created a system of social protection (Sistema de Protección Social en Salud, SPSS) with Seguro Popular (SP)—set up in 2003—as its main health reform pillar (Gomez-Dantes et al, 2013; Garza, 2015; Harris, 2019).

This paper aims to analyse the SP reform to draw lessons on access, outcomes, financial protection, and equity in health services. It draws on the health systems framework laid out by the World Health Organization (WHO) to analyse the outcomes and challenges of the reforms, which could be instructive for comparable countries.

The paper is organised into three sections. The first discusses the underlying context for the structural transformation under the SP reform. The second outlines system-level changes, their impacts, and persisting challenges. Taking a subset from the WHO framework, the system-level analysis focuses on four areas: organisation and governance, health financing, physical infrastructure and human resources, and the provision of services. The third section summarises the discussion and outlines possible implications of the reform experience for comparable countries.

## 2. Social, economic, demographic, and political contexts

After three decades of dictatorship in Mexico, the 1910–17 revolution paved the way for the legal constitution of second-generation human rights,<sup>1</sup> including the rights to health and education. The decades after 1920 saw progressive health reforms that can be viewed through three broad phases: 1920–83, 1983–2003, and 2003 onwards.

Before 1920, the government was not a key actor in the provision of health. Post 1920, while establishing a parliamentary democracy, Mexico initiated a set of social and economic reforms aimed at achieving high economic growth along with social development. These were broadly focused on social security, the introduction of new institutions, the introduction of medical interventions, and the expansion of primary care services. The focus on health led to the enactment of health as a legal right in 1983.

Social security institutions were created to provide universal health coverage to both private and state workers and their families, with the assumption that the majority of the working population will be employed in the organised sector in the decades to come. The focus on providing social security to the employed population implied that the poor and vulnerable remained out of the ambit of health insurance. The Ministry of Public Health and Assistance was thereafter created in 1943 to enable the state to play a greater role in the provision of health, and specifically, to provide coverage for the poor and vulnerable. A range of public interventions were implemented to strengthen preventive medicine, such as IMSS COPLAMAR<sup>2</sup> in 1981 and national vaccination days in 1986 (Gomez-Dantes, Frenk, & Ibarra, 2013; WHO, 2017).

<sup>&</sup>lt;sup>1</sup> "The first generation-human rights were the result of the victory of liberalism in the French revolution. These include right to life, freedom of thought, freedom of speech, equality before law", etc (Gomez-Dantes, Frenk, & Ibarra, 2013, p. 375).

<sup>&</sup>lt;sup>2</sup> "IMSS COPLAMAR (National Plan for Depressed Zones and Marginal Groups) was targeted at non-wage-earning citizens and the rural poor and aims to provide preventive and curative health services, with the federal government and The Mexican Institute of Social Security (IMSS) contributing 60 and 40 percent of the operating costs, respectively" (Mexico, 1985).

Additionally, the Ministry of Health (MoH) launched a coverage extension programme in 1976, focused on primary care, and targeted at extending the coverage of essential health services in rural and hard to reach areas. Health professionals (physicians, nurses, and technicians) were trained and new primary health centres (PHCs) were built in rural areas. However, service delivery through PHCs remained passive in nature (patients had to visit health centres for treatment), and the density of physicians was not increased according to local needs (WHO, 2017).

Institutional reforms and medical interventions contributed to demographic and health outcomes, which saw considerable progress between 1970 and 1990 (Table 1). Life expectancy at birth increased by nine years, infant and under-five mortality improved by more than 50 percent, and fertility rates decreased from 6.6 births per woman to 3.5 (World Bank, 2020). Some attributed the improvement in the early 1970s to greater urbanisation with the subsequent increase in the concentration of medical professionals in urban areas, while others highlighted the significance of targeted interventions such as IMSS COPLAMAR (Cañedo, 1975; Laveaga, 2015).

Indicators	1970	1990	Percentage change, 1970–90
Mortality rate, infant (per 1,000 live births)	76.3	36.3	52.4
Mortality rate, neonatal (per 1,000 live births)	43.9	22.5	48.7
Mortality rate, under-five (per 1,000)	106.7	45.4	57.4
Total fertility rate (births per woman)	6.6	3.5	46.9
Urban population (% of the total population)	59	71.4	21
Life expectancy at birth (years)	61.4	70.9	15.4

#### Table 1: Demographic and health outcomes, 1970–90

Source: World Bank, 2020

The later part of this phase was one of pronounced economic vulnerabilities (in the late 1970s), arising from the breakdown of the international oil market and Mexico's dependence on it, and the introduction of neoliberal policies (in the late 1980s). The economic role of the state in the global economy shrunk, which affected health funding (Figure 1).<sup>3</sup>

Neoliberal policies did not succeed in delivering growth or reducing poverty levels (Figure 1). Income inequality worsened, with the Gini coefficient increasing from 0.425 in 1984 to 0.52 in 2000. The projected transition to formal employment was not realised. A 2006 evaluation of the conditional cash transfer programme PROGRESA found that only 0.4 percent of the beneficiary families of five million could be lifted from extreme poverty between 1997 and 2006 (Moreno-Brid et al, 2009; CountryEconomics, 2022).

<sup>&</sup>lt;sup>3</sup> The economic crisis led to a drastic cut in funding for IMSS COPLAMAR. NMR, IMR, and U5MR recorded a marginal change in the improvement rate during 1980–95.

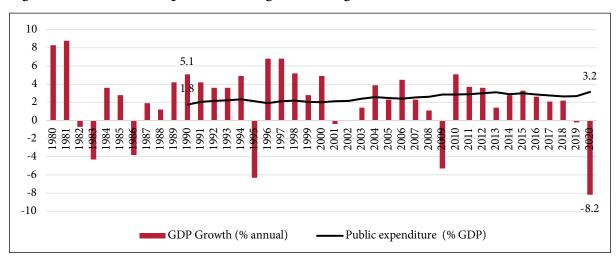


Figure 1: Public health expenditure along with GDP growth, 1990-2020

Source: CountryEconomics, 2022

By enacting the right to health in 1983, Mexico attempted to initiate mechanisms that enable the realisation of this right. Fiscal constraints at the centre led to the decentralisation of health financing and governance in the mid-1990s in an attempt to reduce the central contribution and transfer fiscal and governance responsibility to states. The states were required to contribute to health financing, where their contribution was determined by the availability of fiscal resources. The MoH claimed that this reform measure would increase the quality, efficiency, and productivity of the existing health system through the greater participation of local managers. This was expected to lead to greater equity in terms of financing and health outcomes, but the continued state dependence on central funds implied that the decentralisation reforms did not meet with much success. In fact, disparities in health expenditure increased as wealthier states were able to charge higher copayments from users. Consequently, inequity and inefficiency prevailed, and the planned outcomes of decentralisation were not met (Homedes & Ugalde, 2009).

It was during this period (1983–2000) that the Mexican government also attempted to privatise the healthcare system with the same objective of increasing the system's efficiency, productivity, and quality. Based on the argument that privatisation would increase market competition and provide more choice to patients, the World Bank provided a loan to the Mexican government—on the condition that IMSS beneficiaries are allowed to choose private providers for treatment, thereby increasing the share of private providers (Homedes & Ugalde, 2009).

#### 2.1 Key issues pre-reform

Mexico introduced several initiatives in the decades before the 2003 reforms in the form of decentralisation, conditional cash transfers, targeted medical interventions, leveraging the private sector, and improving primary care coverage. The country witnessed an improvement in outcomes but inequities in access to health services and outcomes persisted. Government spending on health remained low in this period and household expenditure on health was high.

The status of communicable diseases and maternal and neonatal health improved during the period 1990–2000, but Mexico faced a rapid epidemiological transition. The country witnessed a rise in deaths due to non-communicable diseases (NCD)—reaching 70 percent in 2000—with deaths due to communicable, maternal, neonatal, and nutritional factors reducing from 28.7 percent in 1990 to 17.3 percent in 2000. Mexico currently faces a large burden of NCDs, which contribute about 80 percent of total deaths (Figure 2).

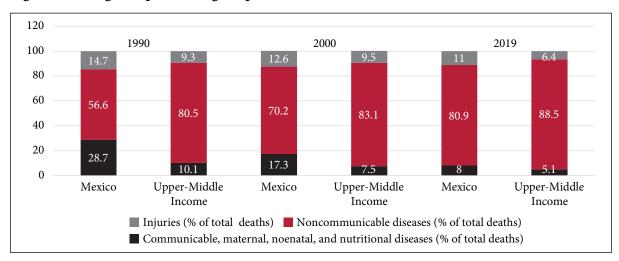


Figure 2: Change in epidemiological profile, 1990-2019<sup>4</sup>

Source: IHME, 2022

Life expectancy in Mexico increased, though nominally. Neonatal infant and under-five mortality rates dropped significantly, and Mexico fared well in comparison to other upper-middle-income countries (Figures 5–8). Although national averages improved, the most significant challenge facing the country was one of the inequities (Figure 3, 12). Despite the Mexican government's endeavour to decentralise health services and implement comprehensive primary healthcare, inequities in financing, the supply of physical and human resources, and consequently in health outcomes persisted. The gaps did, however, narrow between 1990 and 2000: The maternal mortality rate (MMR) gap reduced from 154 to 100, the infant mortality rate (IMR) from 33 to 17, and under-five mortality rate (U5MR) from 38 to 19 (Figure 3). Even though MoH was serving a large part of the population (49 percent),<sup>5</sup> the allocation of financial resources was grossly inequitable; consequently, the availability of physical and human resources was not adequate (Figure 4).

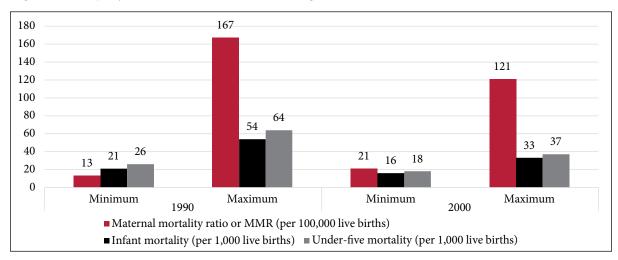
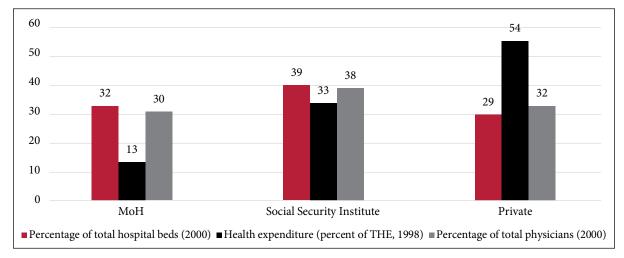


Figure 3: Inequity in health outcomes across regions, 1990-2000

Source: DGIS, 2022

<sup>&</sup>lt;sup>4</sup> The graph compares Mexico with the upper-middle socio-demographic index (SDI) countries based on the IHME definition. SDI is a composite index comprised of income, education, and fertility. Here, income has been taken as a proxy of SDI.

<sup>&</sup>lt;sup>5</sup> After adjusting for the 30 percent of the total IMSS beneficiaries who lose their jobs every year (Block et al, 2020), this percentage goes up to 59 percent.



## Figure 4: Distribution of physical and human resources against health expenditure at the provider level

Source: PAHO, 2002

Public health expenditure saw a limited increase: from 1.7 percent of the GDP in 1990 to 2 percent of the GDP in the 2000s. Public health expenditure as a percentage of total health expenditure remained low in comparison with some upper-middle-income countries (Figure 10). 49 percent of the Mexican population remained uninsured in 2003, and out-of-pocket (OOP) expenditure on health comprised 54 percent of the total health expenditure, higher than in comparable countries (Figure 11) (Moreno-Brid et al, 2009; OECD, 2005; Block et al, 2020).

The chronic underfunding of government health institutions run by the Ministry of Health (MoH) was one of the main reasons not only for the high OOP expenditure but also the gaps in health infrastructure (Figure 13). For example, the supply of beds and healthcare personnel in MoH hospitals and facilities used primarily by the poor and vulnerable population was limited, which disproportionately impacted the poor (Figure 14).

Presented below are trends in these indicators as well as in health outcomes across countries, arranged according to per capita GDP (constant US\$ 2015 prices) for the year 2000.

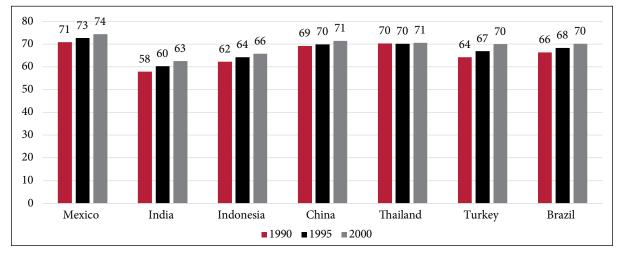


Figure 5: Life expectancy at birth, total (years)

Source: World Bank, 2020

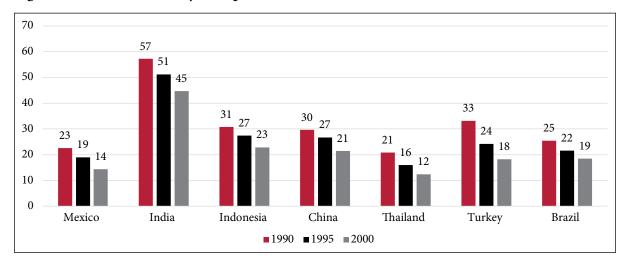


Figure 6: Neonatal mortality rate (per 1,000 live births)

Source: World Bank, 2020

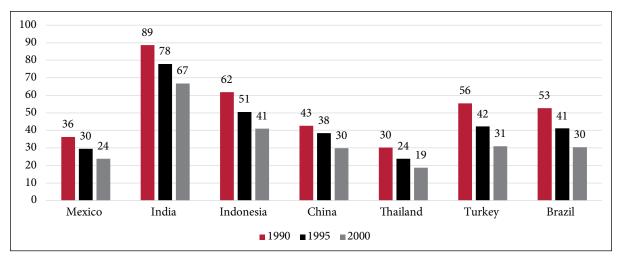
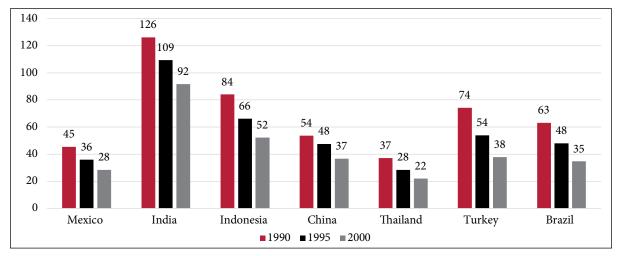


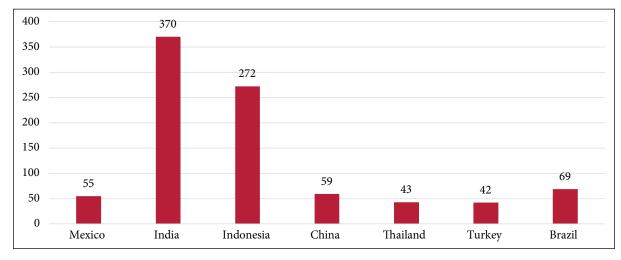
Figure 7: Infant mortality rate (per 1,000 live births)

Source: World Bank, 2020



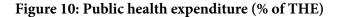
#### Figure 8: Under-5 mortality rate (per 1,000 live births)

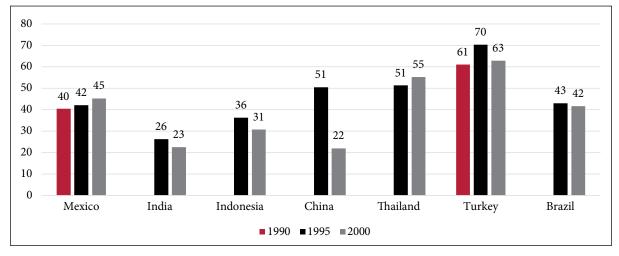
Source: World Bank, 2020



#### Figure 9: Maternal mortality ratio (per 100,000 live births), 2000

Source: World Bank, 2020





Source: PAHO, 2018; Tatar, et al., 2011; PAHO, 2002; DGIS, 2022; Mahendradhata, et al., 2017; Jongudomsuk, et al., 2015

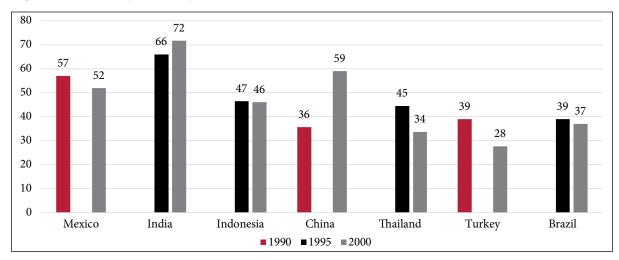


Figure 11: Out-of-pocket expenditure (% of THE)<sup>6</sup>

Source: PAHO, 2018; Tatar, et al., 2011; PAHO, 2002; DGIS, 2022; Mahendradhata, et al., 2017; Jongudomsuk, et al., 2015

<sup>&</sup>lt;sup>6</sup> The out-of-pocket (OOP) value (44.5) for Thailand is for the year 1994 and the values for hospital beds in Brazil (3.1) and Indonesia (0.7) are for the years 1996 and 1994, respectively.

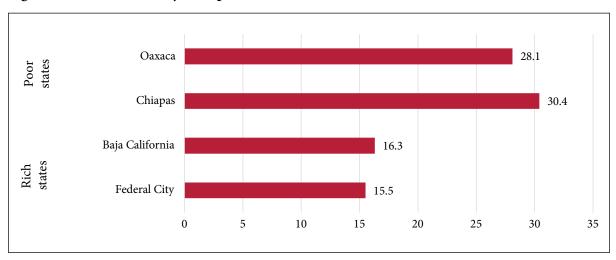
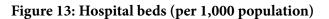
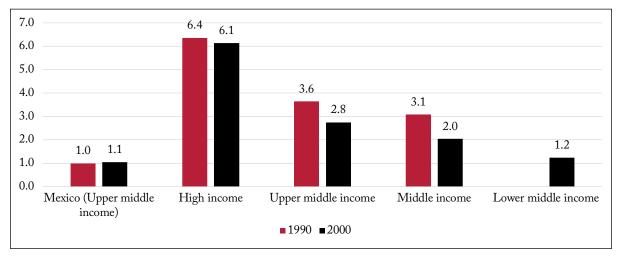


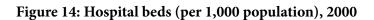
Figure 12: Infant mortality rate (per 1,000 live births), 2000

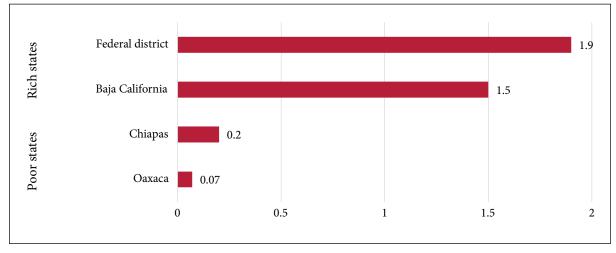
Source: DGIS, 2022





Source: World Bank, 2020





Source: DGIS, 2022

## 3. Organisation and structure of health services

It was in the context of low public expenditure, high out-of-pocket expenses, and inequity in health coverage that the Mexican government implemented the health insurance programme, Seguro Popular, in 2003. Before 2003, nearly half the Mexican population was not employed in the formal sector and did not have health insurance. Increasing industrialisation led to the creation of differential systems of social health insurance across the insured and uninsured. Segmented entitlements across the two systems led to significant differences in financing, the availability of physical and human resources, and system capacity to address the health needs of the population (Frenk et al, 2006; Lozano & Garrido, 2015).

In 2003, Seguro Popular (SP) was introduced to address this inequity. Available to all citizens with no social security, SP was aimed at 1) reducing gaps in access to healthcare services, 2) increasing public health expenditure, and 3) reducing OOP and catastrophic health expenditure (Block et al, 2020). The programme aimed to increase public funds for healthcare and reduce inequities in health coverage, improve health outcomes, reduce out-of-pocket expenditure, and reform the organisation of the existing health service system. The following paragraphs discuss the reforms in terms of the organisation and governance of the health system, delivery of health services, physical infrastructure and human resources, and health financing. Key pre-reform components along with the SP response are summarised in Table 2.

#### 3.1. Organisation and governance

As mentioned, the primary objective of the reforms before 2003 in the form of decentralisation and privatisation was to improve the quality, efficiency, and productivity of the health system to achieve equity (in terms of both financing and health outcomes) in the long run. These objectives, however, were not met, with continuing inefficiencies, lack of accountability, and little institutional agency to check fund flows and expenditures.

It was in this context that three mechanisms were applied as part of SP to achieve the stated objectives: 1) a purchaser–provider split and the creation of an autonomous agency (REPSS) at the state level to allocate and oversee the expenditure of funds at the provider level; 2) allowing greater participation of private providers through contracts to increase patient choice and subsequently coverage; 3) an increase in public expenditure (Homedes & Ugalde, 2009; Nigenda et al, 2015).

The current health system architecture in Mexico includes the three pillars of funding, provisioning, and regulation with three mechanisms for service provision. Salaried citizens and their families receive services through social insurance institutions such as the Mexican Institute of Social Security (IMSS) for private employees and the Institute for Social Security and Services (ISSSTE) for state workers. Uninsured citizens receive services through The Institute of Health for Welfare (INSABI),<sup>7</sup> in collaboration with state governments (replacing what was previously covered under Seguro Popular). Citizens access private services through pharmacy clinics and specialised hospitals (Figure 15).

Mexico has a mixed health system of both public and private networks, each with its own primary, secondary, and tertiary units. Primary healthcare units serve a fixed catchment of households in a geographical region. Services at these units are provided by a combination of a family physician or general practitioner and a clinical or public health nurse, whereas ambulatory care medical units and speciality units provide specialised outpatient care (Block et al, 2020).

<sup>&</sup>lt;sup>7</sup> INSABI replaced SP in 2020.

Components	Pre-reform	Post-reform
Governance	The uninsured population had limited access to health services with user fees in public hospitals.	SP introduced 294 medical interventions for 647 medical conditions and 66 catastrophic conditions. No user fees for listed services.
	There was no right to choose a provider for the patients.	Choice of provider expanded by empanelment of private facilities.
	Leakage in fund flows from the state treasury to state health providers.	Separation of purchasing from provisioning by establishing a decentralised agency (REPSS) outside the purview of the state secretary of health, which is responsible for ensuring accountability and transparency in funds flow.
	There was no specific regulation for private clinics and pharmaceuticals.	SP created the Federal Commission for Protection against Sanitary Risks (COFEPRIS) to regulate private establishments and pharmaceuticals.
	No check on specific expenditures such as HR, pharmaceuticals, and other investments.	SP issued specific guidelines for expenditure on all health items and put a ceiling on each item to reduce overspending.
Health financing	Doctors had fixed salaries without any checks on their performance.	Payment through contract mechanisms introduced (without linking performance to payments).
	National Health System model—funding through general taxation.	Funding based on social insurance formula, i.e., a tripartite contribution from federal, state entities, and affiliates.
	Low per capita expenditure for the uninsured population.	SP increased per capita expenditure for the uninsured by introducing a capitation- based payment system.
Physical and human resources	Inequitable distribution of health facilities across the country.	SP attempted to increase the number of health facilities through public-private service agreements.
	Insufficient human resources in poorer states.	SP attempted to reduce inequity by hiring human resources based on short-, medium-, and long-term contracts.
Health service delivery	Health centres were providing PHC services but lacked comprehensive preventive and curative services.	Through increased health insurance and incorporation of private provisioning, SP endeavoured comprehensive PHC provisioning.
Quality of care	No accreditation of PHCs and voluntary accreditation of public hospitals.	SP ensured the incorporation of federal norms in the service agreement with the provider (both public and private) to enhance the quality of care.

 Table 2: Comparing Seguro Popular pre- and post-reform

To achieve its objective, SP aimed at improving efficiency and accountability in resource use by decoupling purchasing from the provisioning of services. Decentralised institutions were set up at the state level: the State Regime for Social Protection in Health (REPSS) for allocating and managing financial resources based on the number of people enrolled in SP; and the National Commission for Social Protection in Health (CNPSS) at the national level for coordinating between SP and REPSS, thus changing the determinants of financing from the supply to the demand side (Lozano & Garrido, 2015; Block et al, 2020).

Financing healthcare has traditionally been based on the employment status of citizens and their ability to pay. Social security institutions in Mexico cover those who are employed in the formal sector (Figure 15), with contributions from the government (both federal and state), employers, and employees. SP covered the uninsured—funded through contributions from the federal government, each state entity, and citizens (where they were in a position to contribute). The contribution from SPSS beneficiaries was dependent on their ability to pay and constituted an insignificant share of the total (Block et al, 2020).

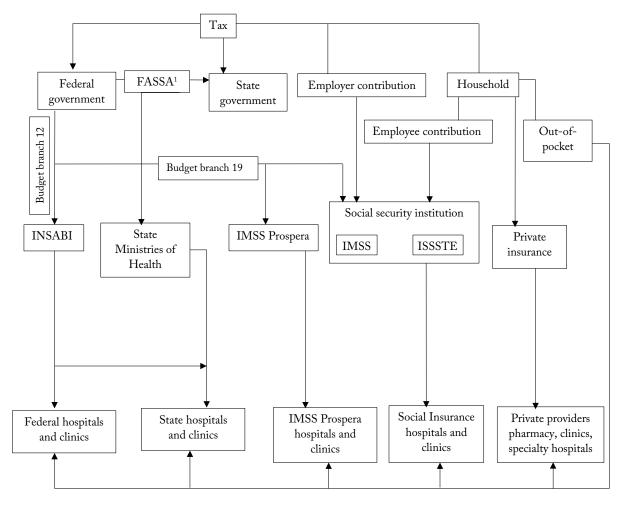
Even after 15 years of implementation, SP experiences challenges in both coverage and quality. About 20 million people—or 15 percent of the population—continued to lack insurance cover in 2019.<sup>8</sup> Additionally, SP beneficiaries could not access the comprehensive medical care available to their employed counterparts. Finally, the absence of pay-for-performance criteria in contracts between the REPSS and provider agencies undermined quality and created loopholes for inefficiencies and corruption (Reich, 2020). The gaps in coverage were linked with the requirement of states' contribution, which, in turn, was dependent on their fiscal position. The latter affected the enrolment of people in the programme, and therefore impacted universal coverage. Most of the uninsured citizens belonged to poorer states, which were unable to cover them due to their financial situation (Laurell, 2007; OECD, 2016).

Given these gaps, the current Andrés Manuel López Obrado (AMLO) administration announced a comprehensive health plan, INSABI, based on the recentralisation of the system, funded entirely through general taxes (Table 2). INSABI aims to provide free care and medicines to the entire population, delivered mainly through government hospitals, clinics, and speciality centres (Salcedo-Álvarez et al, 2019).

The centralised health model, INSABI, replaced the old health insurance system, SPSS, and aimed to provide free medical services to the uninsured population earlier affiliated with SP. The tax funding for INSABI follows two routes: funds to state governments for human resource and infrastructure development in state hospitals and primary health clinics;<sup>9</sup> and direct funding to INSABI for administrative expenditures and health services (medicines, supplies, human resources, and infrastructure) in federal hospitals and clinics. Additionally, citizens pay out of pocket for services from private providers when uncovered by insurance or while availing of services not provided by empanelled hospitals (Block et al, 2020; Reich, 2020).

<sup>&</sup>lt;sup>8</sup> It is important to note here that those who lacked both SP and social security insurance had to access medical services on fee-for-service.

<sup>&</sup>lt;sup>9</sup> It is still unclear how INSABI will administer fund flows to state hospitals and PHCs to be utilised by the poor under INSABI's supervision.



#### Figure 15: Health system architecture of Mexico, 2020

Source: Block, et al., 2020

Note: 1. FASSA: Health Services Contribution Fund. FASSA provides funds to states (for uninsured) under line item 33 for human resource and infrastructure maintenance

*Line item 12 is for administrative costs and services provided previously under SP, now INSABI Line item 19 from the federal expenditure budget paid to social security institutions* 

#### Achievements and challenges

SP envisaged a new pathway to its objectives: the creation of competitive health markets by separating purchasing from provisioning,<sup>10</sup> with the expectation that the purchase of services through contracting would invite private providers to become involved in delivery and increase system efficiency. The creation of a central purchasing agency (CCPNM) helped contain costs (budgets for medicines reduced by 6 percent per annum since 2012) and make medicine supply chains more efficient. Mismanagement of funds was addressed through the creation of an institution that monitored REPSS and applied penalties for the misuse of resources (Block et al, 2020; Reich, 2020; Ruiz, Ratsch, & Martinez, 2018).

The health system was restructured by the Mexican government in 2003 to address the challenges mentioned prior, but it faced design and governance limitations:

<sup>&</sup>lt;sup>10</sup> A.C. Laurell (2007) argued that the SP reform model was intended to dismantle the social security institutes and impose a managed competition model in the long run (Laurell, 2007, p. 520).

- 1. Due to the federal nature of the state, managerial agreements were made at three levels: federal, state, and local. Even though there were uniformities in the federal-state agreements, state-local agreements varied greatly. Some agreements specified that the REPSS would distribute resources locally based on federal and state funding, whereas some opted for monthly per capita payments, and others defined payments by interventions listed by the CNPSS. The lack of an integrated health information system resulted in poor monitoring mechanisms, as central agencies like the CNPSS were unable to track expenditures at the local levels in the absence of an integrated information system. This led to inefficiencies in funds flow and management and opened the window for corruption and inefficiency in financial distribution (González-Robledo et al, 2017).
- 2. It was mandated that state governments would pay a fixed premium per family on the premise that both federal and state governments would share the costs. However, the requirement that states provide resources based on the number of beneficiaries enrolled per year turned out to be an inequitable arrangement, with poorer states having a larger uninsured population and needing to pay more (Laurell, 2007).
- 3. Reform measures did not adequately take into consideration inadequacies in infrastructure and human resources. While SP focused on equity in terms of gaps in human resources and infrastructure, a key challenge was the lack of attention to infrastructure and human resource norms prevalent pre-reforms. The focus on filling the gaps as per the given norms ignored the possibility that density-based norms may themselves be inappropriate, leading to no changes to composition and expansion at the grassroots. The absence of structural changes in this respect resulted in low progress on health outcomes and equity in health coverage (Conti & Ginja, 2017; Laurell, 2007).
- 4. The reform measures did not strengthen the health information system for better epidemiological surveillance data, resulting in states being unable to evaluate the effectiveness of health service delivery and the impact of SP on health outcomes (Laurell, 2007).
- 5. The reforms did not take into consideration the flow of people from the formal to the informal workforce, and the impact of this on health cover. In 2014, up to 38 percent of workers in the formal sector—insured by IMSS—ceased to be employed for more than two months, and, therefore, also lost their insurance coverage (Block et al, 2020).

In summary, Mexico reorganised its health system to better respond to gaps in access to health services, low health allocations, and high OOP expenditures. This improved access to services through expanded coverage—made possible by funds that were specifically targeted at the uninsured population. However, coverage remained low in terms of numbers and illnesses due to structural design aspects. The need for states to contribute implied that fiscally constrained states who invariably had a larger number of poor were unable to cover the entire catchment of the uninsured population. Differential benefits packages for different funds—with the ones under SP excluding several critical illnesses—implied that even those who were covered were not fully covered. Mexico attempted to bring in efficiencies by decoupling the purchasing and provisioning of services, but without a "payfor-performance" system, quality remained poor. The government also attempted to improve access by focusing on filling infrastructure and health workforce gaps, but the failure to review density norms themselves led to continuing shortages in both infrastructure and the health workforce.

#### 3.2. Health system delivery

Even though health indicators at the national level were at par with upper-middle-income countries, Mexico was facing large disparities in health status at the sub-national level before the reforms. The scarcity in the supply of physical and human resources, and the absence of health insurance for the poor and vulnerable, were major determinants of uneven access to care (Knaul & Frenk, 2005).

As mentioned, the economic crisis and large public debt in the 1990s led to the devolution of financing and decision-making on fund utilisation and workforce recruitment to the states. With the introduction of SP reforms—whose predominant focus was providing financial protection for the uninsured—attention got diverted away from this agenda, reinforced by the lack of success of decentralisation in achieving financial autonomy for state health institutions. The shift in focus to financial protection implied that expenditure on financial protection came at the cost of strengthening the delivery system, with the supply side of the health system witnessing few reforms.

Due to low expenditure on the uninsured during the 1990s (12 percent of the national health expenditure compared with 39 percent for the insured population), the health service utilisation of MoH facilities was comparatively lower than that of SHI facilities in the early 2000s. This created space for the expansion of private clinics and hospitals. About 24.7 percent of medical clinics and 74 percent of hospitals were private just before the SP reforms. This expansion of unregulated private health services led to high OOP expenditure due to variations in user fees, pharmaceutical prices, and inequities in the distribution of private facilities (PAHO, 2002; Block et al, 2020; OECD, 2016).

Consequently, Seguro Popular focused on two main policy levers to undo the historical disparity in access to care. One, it introduced a nationally defined benefits package for both low- and high-cost illnesses, ensuring free access at the point of care. Two, it aimed at increasing the supply of physical and human resources in deprived areas (Knaul & Frenk, 2005). However, no structural change was made in the mode of delivery, which remained a traditional (passive) PHC model with the predominance of hospital care as the main channel of healthcare delivery.

Given the presence of an extensive private provider network, SP attempted to leverage the existing private capacity by contracting out health and diagnostic services to private facilities. However, in the absence of regulation of capital investment, most new establishments (specifically hospitals) were built in urban centres, reducing the potential for such contracting in rural areas.

Medical clinics continued to grow after the introduction of SP. The growth in private outpatient clinics from 12,455 in 2000 to over 60,000 in 2018 led to a significant increase in private consultations (from 31 percent in 2000 to 38.9 percent in 2012), with 40 percent of the total out-of-pocket expenditure relating to such consultations (PAHO, 2002; Block et al, 2020; WHO, 2017).

The preference for private facilities was reinforced by the inequitable distribution of public facilities and the poor quality of the same, resulting in only about half the total population having effective access to public health facilities in 2012 (Gutiérrez et al, 2014).<sup>11</sup>

#### Achievements and challenges

SP was successful in providing health insurance to 43.3 percent of the total population that was previously uninsured, although the contribution of SP to access to services and outcomes has been a subject of debate (Reich, 2020). Some have argued that SP reduced child mortality by 7 percent between 2002 and 2010 and increased access to health services among the urban poor (Conti, 2016, 2017), while others contend that coverage of vaccination-related services, antenatal care (ANC), and births attended by skilled health staff had reached over 90 percent before 2004 (OECD, 2022).

What is important to note here is that health outcomes did continue to improve after the introduction of SP, but the pace of improvement declined (Table 3). This decline may be used to question the effectiveness of PHC reforms on outcomes, but it needs to be kept in mind that rates of change do decrease as outcomes improve. SP's focus on financial protection came at the cost of structural changes in the delivery system, due to which perhaps maternal and child health outcomes witnessed

<sup>&</sup>lt;sup>11</sup> The measurement of effective access is done based on the likelihood of a person to utilise public health services without being exposed to any barrier including finances.

a declining rate of improvement, pre- and post-reform. The neonatal mortality rate (NMR) and infant mortality rate (IMR) declined by 31 percent and 18 percent respectively during 2000–05, with the rate of decline reducing to 9 percent and 15 percent between 2005 and 2010, respectively. Health outcomes improved, comparing well with the average of upper-middle-income countries by 2020, but they remained below the OECD average. The rate of change in deaths due to communicable diseases saw similar trends. In the case of deaths due to NCDs, SP failed to demonstrate any impact as the NCD burden increased. All these factors pose critical questions about the impact of Seguro Popular on the health of the population.

Indicators	2000	2005	2010	2015	2020	UMIC Average	SDG Target
NMR (per 1,000 live births)	14.4	9.9	9	8.3	8.4	6 (2020)	<12
IMR (per 1,000 live births)	23.8	19.5	16.4	13.9	11.8	9 (2020)	
U5MR (per 1,000 live births)	28.4	22.9	19.2	16.2	13.7	11 (2020)	<25
MMR (per 100,000 live births)	55	54	46	36	33 (2017)	41 (2017)	<70
Stunting among children below 5 years of age (%)	20.3	16.4	13.5	12.4	12.1	8.1 (2020)	<40% of 2012 level
Low-birthweight babies (% of births)	8.2	8	7.9	7.9	NA	7 (2015)	
Communicable diseases (% of total deaths)	17.3	13.5	11	9.2	8 (2019)	5 (2019)	
Non-communicable diseases (% of total deaths)	70.2	75	77	79.9	81 (2019)	88 (2019)	
Tuberculosis death rate (per 100,000 people)	3.7	2.7	2.3	1.8	1.7	NA	

#### Table 3: Health outcomes, 2000-20

Source: World Bank, 2020; DGIS, 2022; IHME, 2022; WHO, 2022)

The failure to take into consideration the heterogeneity in the distribution of private providers also caused low progress on universal health coverage (UHC). Private providers were located predominantly in urban areas, and the focus on filling gaps through private provisioning did not lead to equity. There was inadequate regulation and support from the state for the poor and vulnerable (Block et al, 2020; OECD, 2022; Laurell, 2007; Global Health Watch, 2022).

The absence of an adequate focus on the delivery system implied that inequities in coverage remained a challenge after the SP reforms as well. Evidence suggests that access to healthcare services among SP-insured rural households is much lower than those living in urban localities; there are bigger gaps between urban dwellers and the indigenous population in geographically inaccessible areas; and there are accessibility gaps between the richest and the poorest segments (Grogger et al, 2015; Carrillo-Balam et al, 2019; HDX, 2022). Inadequate infrastructure and health workforce, as outlined in the next section, contribute to access gaps. This underlines the limitations of a disproportionate focus on insurance coverage and the need for a simultaneous structural reform in the delivery system to improve accessibility and, ultimately, health outcomes.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> It is important to create autonomous government institutions that can objectively assess the functioning of PHCs. Besides this, increasing the density of family physicians per 1,000 inhabitants is equally critical to improving the performance of PHCs.

In summary, the Mexican health system is a mixed delivery system with a large network of private providers that existed before the SP reform took place. SP leveraged private providers as part of its reform by separating purchasing from provisioning, which, in turn, led to the further expansion of private actors. The lack of regulation led to the disproportionate presence of such providers in urban areas, creating inequities in distribution compounded by the poor distribution of public facilities. The growth of private providers led to increased use of private healthcare and high out-of-pocket expenditure on health.

SP helped increase coverage and reduce OOP expenditure on health. While improvements in health outcomes were also visible post–SP reforms, it has been argued that with secular progress on outcomes from the time before reforms, the precise impact of SP in this regard is questionable, especially since the rate of progress declined post-reforms. It has been argued that SP's disproportionate focus on insurance diluted attention and resources away from structural reforms concerning the delivery system.

#### 3.3. Infrastructure and human resources

Mexico faced a significant undersupply of physical resources (in terms of hospital beds per 1,000 inhabitants) at the national level before the reforms (Figure 13). Public expenditure on health was comparatively lower than in other upper-middle-income countries (Figure 10), and disparities in health expenditure at the provider level (across MoH and social security institutions) resulted in inequities in the distribution of hospital beds across states (Figure 14).

With government funding being inadequate to address the gaps in health infrastructure, the government mobilised the private sector for public–private service (PPS) agreements through purchasing mechanisms to fund infrastructure projects post-2003.

The 2020 MoH data on physical infrastructure indicates that there was an overall increase in both PHC and hospital units post-2003, with the total number of MoH (SSA) hospitals doubling since 2001 (Tables 4 and 5). There was substantial growth in the number of privately owned consultation clinics (adjacent to pharmacies), which comprise over 85 percent of the total PHCs in the private sector (Block et al, 2020).

Indicators	2001	2020	% Change
Medical offices	23,395 (2000)	41,355 (2019)	76
Outpatient clinics (PHC)	11,321	13,945	23

#### Table 4: Growth of outpatient care units, MoH (SSA), 2001-20

Source: DGIS, 2022; Conti & Ginja, 2017

With regards to hospitals, the availability of inpatient care for the uninsured (half the total population) remained significantly low even after the reforms, with the proportion of total hospitals allocated for the poor and vulnerable (Table 5) in the public sector amounting to less than 20 percent (DGIS, 2022). With the increasing number of private hospitals incorporated after SP, the availability of private hospitals has increased, but bed capacity remains low—with more than 90 percent having under 50 beds (Block et al, 2020).

Institutions		2003		2020
	Hospitals	% of total hospitals	Hospitals	% of total hospitals
МоН	462		812	
IMSS Bienestar	69	12.9 80		18.5
University	5		6	
Social Security Institution	575	13.9	612	12.6
Private	3,039	73.2	3,349	68.9
	Hospital beds	% of total hospital beds	Hospital beds	% of total hospital beds
МоН	31,549		39,807	
IMSS Bienestar	2,181	31.2	2,035	34.7
University	347		955	
Social Security Institution	41,897	38.4	46,688	37.8
Private	33,156	30.4	33,980	27.5

#### Table 5: Comparing the availability of inpatient care for the uninsured

Source: DGIS, 2022

Despite increased investments, public infrastructure remained low and equity remained a challenge. During the post-reform period (2003–19), private outpatient clinics grew at an alarming rate and high complexity hospitals remained concentrated in urban areas. Inadequate public investment and weak private-sector regulation are some of the plausible explanations for the inequitable supply of MoH health facilities (WHO, 2017; Block et al, 2020). Comparatively poorer states such as Baja California continue to face an acute shortage of health infrastructure, with the capital city alone having 14.8 percent of the total beds in the country along with a concentration of high-speciality public hospitals (DGIS, 2022).

SP aimed at achieving a more equitable distribution of government health centres and hospitals and accordingly increased investments in health infrastructure in less-developed states. Despite this, capital investment in the sector (0.11 percent of GDP during 2003–16) remained lower than the average investment of OECD countries (0.39 percent during 2003–16), explaining the sluggish growth in health infrastructure across the country (Conti & Ginja, 2017; Block et al, 2020).

As is the case in many other countries, there is considerable discrepancy in the human resources data from different sources, particularly the MoH and the National Survey of Occupation and Employment. Sources suggest that the pre-reform availability of physicians at the national level (1.6 per 1,000 inhabitants in 2000) was lower than the OECD average (2.7 in 2000); and despite the MoH serving a larger proportion of the population, the supply of physicians in MoH facilities was significantly lower in comparison with other providers (Block et al, 2020; OECD, 2019).

Additionally, the distribution of physicians was uneven across states. Physicians per 1,000 inhabitants in marginalised municipalities was 0.7, whereas it was 2.5 for wealthier municipalities in 2000. Therefore, to achieve equity in health outcomes, SP aimed to increase the supply of physicians in MoH facilities—which was the main point of care for poor segments of the population.

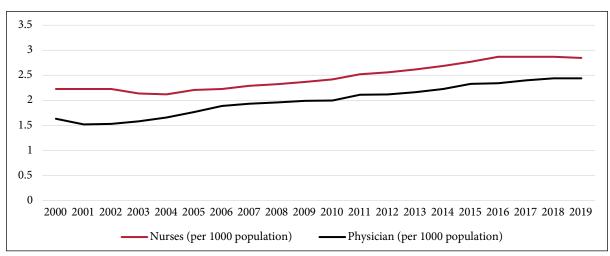
Despite SP's attempts at increasing medical practitioners, which resulted in an increase of 90 percent in physicians and 63 percent in nurses (Table 6, Figure 16), the average density of medical practitioners (per 1,000 inhabitants) in Mexico remained low in 2019—at 2.4 (both general and specialist combined) compared with the OECD average of 3.6. Challenges of equity persist, with the density of medical specialists in the wealthier state of Mexico City being 2.5 per 1,000 inhabitants but the state of Chiapas being 0.4 specialists per 1,000 inhabitants. As per the National Survey of Occupation and Employment, 71 percent of general medical practitioners were employed in the public sector and 29 percent in the private sector in 2016. However, dual practice was common across both categories (Block et al, 2020).

One of the reasons for the lack of success in ensuring adequate numbers of physicians in MoH facilities is the overburdening of state finances, where poorer states with limited revenue failed to hire physicians commensurate with local needs (Nigenda et al, 2015).

	2003	2019	Percentage change 2003 2019	OECD average (2018)
Generalist medical practitioners (per 1,000 people)	0.6	0.9	79.25	1
Specialist medical practitioners (per 1,000 people)	1	1.6	96.84	2.2
Total number of physicians (per 1,000 people)	1.9	2.4	90.12	3.3
Nurses (per 1,000 people)	2.1	2.9	63.52	8.9

#### Table 6: Distribution of human resources, 2003–1913

Source: OECD, 2022



#### Figure 16: Physicians and nurses per 1,000 people

Source: OECD, 2022

<sup>13</sup> All values are in round figures.

#### Achievements and challenges

While there has been some improvement in the total number of hospitals and physicians available to the uninsured population after 2003, their concentration in wealthier states and urban areas has undermined progress towards equitable access (Figure 14, Annex Figure 1a). The lower density of human resources, especially in rural areas, has in part been caused by a lack of professional development and fewer incentives to work in rural areas (Alcalde-Rabanal et al, 2017).

In summary, investments targeted at public infrastructure increased, increasing the availability of public facilities; yet, they remained low, with private facilities growing at a faster rate. SP did attempt to balance the distribution of health facilities, but inequities persisted between rural and urban regions and between less- and more-developed regions.

#### 3.4. Health system financing

As mentioned in the preceding sections, key challenges faced in the context of financing health included low government expenditure on health, financial inequity, and gaps in efficiencies and accountability, all of which combine to constrain the health system in delivering at its optimum.

In 2000, MoH facilities accounted for 13 percent of the total health expenditure, whereas social security institutions accounted for 33 percent (Figure 4). This led to high OOP expenditure at 52 percent of the total health expenditure (Figure 11, Table 7). The financial imbalance across the provider network and the absence of an integrated information system were considered to be the main cause of inefficiencies and mismanagement of funds at the provider level.

There are three main federal funding agencies in Mexico: The National Commission for National Institutes of Health and High Specialty Hospitals (CINSHAE), Undersecretary for Administration and Financing, and INSABI. CINSHAE funds health personnel and physical infrastructure at tertiary healthcare hospitals; the Undersecretary for Administration and Financing funds primary and secondary healthcare services for the uninsured through federal hospitals and state-level hospitals affiliated to state governments; and INSABI funds federal and state hospitals and primary health clinics for various service provision to the population (Block et al, 2002).

SP did have an impact on the skewed financing, though it was not considerable. In 2019, Mexico spent 5.4 percent of its GDP on health, with 23 percent of the current health expenditure (CHE) coming from the social insurance fund, 27 percent from government expenditure,<sup>14</sup> 42 percent paid out of pocket, and voluntary health insurance comprised the remaining 7 percent (Figure 17) (World Health Organization, 2022). Funding for SP was shared between the central government and states, with 80 percent of federal funds and 20 percent of state funds (Reich, 2020).

SP aimed to address the diluted efficiency and accountability in health expenditure through contracting—by separating purchasing from provisioning, introducing demand-based allocations, and designing of a cost-effective package of services. Enabling a purchaser–provider split required new institutional mechanisms, such as the National Commission for the System of Social Protection in Health (CNPSS), which allocates funds to states based on a capitation system. REPSS was established as a decentralised autonomous institution outside the domain of the state public health agency for the allocation of financial resources to states and the purchase of health services (Block et al, 2020; González-Robledo et al, 2017).

In 2014, three other initiatives were introduced to strengthen financial regulation, increase efficiencies, and address mismanagement in the allocation and distribution of funds. The first enabled patients to avail services irrespective of their location; the second earmarked funds for

<sup>&</sup>lt;sup>14</sup> The 23 percent contribution from the social insurance fund comprises employer and employee contributions only.

specific purposes to reduce overspending on specific areas; the third introduced the use of penalties and even imprisonment in cases of illegal acts associated with SP (Ruiz, Ratsch, & Martinez, 2018).

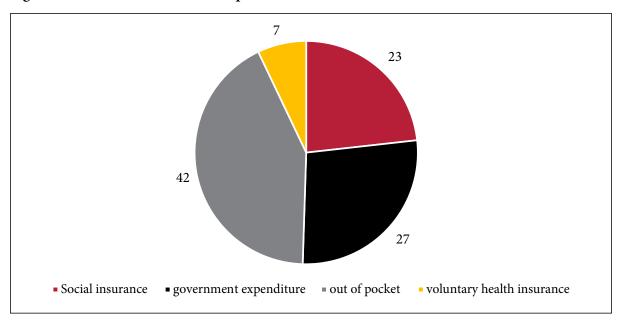


Figure 17: Distribution of health expenditure, 2019

Source: World Health Organization, 2022

#### Achievements and challenges

The existing data suggest that SP increased public health expenditure from 2 percent of the GDP in 2000 to 3 percent in 2015; simultaneously, out-of-pocket expenditure decreased from 52 percent of total health expenditure (THE) to 40 percent for the same period (Table 7). The percentage of the population with impoverishing health expenditure fell from 3.3 percent in 2004 to 0.8 percent in 2014 (CountryEconomics, 2022; OECD, 2016; Lopez, Valle, & Aguilera, 2015; PAHO, 2018; Ruiz, Ratsch, & Martinez, 2018).

Public expenditure, including government expenditure for the uninsured and contribution to social insurance increased from 40.4 percent of the total in 1990 to 50.7 percent in 2020 (Table 7). The increase in public expenditure after 2000 was a direct result of the implementation and continued expansion of SP, but, despite the increase, public health expenditure in Mexico remains the lowest amongst all OECD countries (Block et al, 2020).

Even though SP reduced out-of-pocket expenditure, as suggested by several studies (Homedes & Ugalde, 2009; Ruiz, Ratsch, & Martinez, 2018), at 42 percent of the total health expenditure, it remains the major source of health financing and is higher than in other upper-middle-income countries (Table 9) (World Bank, 2020). In the absence of comprehensive coverage, most out-of-pocket expenditure constitutes direct payments for those not under any social security scheme. Even though medicines are covered under insurance, their unavailability at public clinics and hospitals adds to out-of-pocket expenditure.

There are varied views on the drivers of reduction in OOP expenditure. Some suggest that a significant reduction in OOP expenditure post-2000 (Tables 7 and 9) was the outcome of relatively greater financial equity in expenditure achieved following the general health reform of 2003, while others suggest that it was partially reduced due to the global economic crisis and the reduction in prices of private consultations and generic medicines (Ruiz, Ratsch, & Martinez, 2018; Block et al, 2020).

Indicators	1990	1995	2000	2005	2010	201	15	2020
Gov. health exp. (% of THE)	40.4	42.1	45.2	42.2	50.2	52.	.2	50.7
Private health exp. (% of THE)	59.6	57.9	54.8	57.8	49.8	47.	.8	49.4
Gov. health exp. (% of GDP)	1.8	2.1	2	2.5	2.9	3		3.2
Out-of-pocket exp. (% of THE)			52	54	44	40	)	42 (2018)
Total health exp. (% of GDP)			5.9	6	5.9	5.2	7	5.4 (2019)
Gov. financing for uninsured (% of THE)				16.6	22.1	24.	.2	
Social insurance (% of THE)				26.8	27.4	28.	.8	
Voluntary private health insurance (% of THE)	••		2.3	3.1	4.1	4.4 (2	013)	4.9 (2015)
		2001-05		5 2006-10		10	2	011-15
Mean annual growth rate in THE	ΗE		8.5		4.2			2.6
Mean annual growth rate in GDP			0.3		0.0			-0.6

#### Table 7: Health expenditure, 1990-2020<sup>15</sup>

Source: Block, et al., 2020; Mendoza, 2022

MoH data reveals a decline in health administration costs from 10.86 percent in 2003 to 4.78 percent in 2018 (Table 8). It remains to be examined whether SP reforms contributed significantly to this decrease. While hospital inpatient care costs increased from 17 percent in 2003 to 29 percent in 2018, this was largely due to the increase in public health expenditure for the uninsured population (Table 7).

#### Table 8: Distribution of health expenditure, 2003-18<sup>16</sup>

Indicators	Total health exp (%) (2003)	Total health exp (%) (2018)
Hospital curative care	17.7	29
Outpatient curative care	28.6	30.6
Rehabilitation services	0.2	0.2
Auxiliary services	2.3	2.2
Medical goods	37	26.7
Preventive care services	1.7	2.9
Government system and administration	10.9	4.8

Source: DGIS, 2022

<sup>&</sup>lt;sup>15</sup> All values are in round figures.

<sup>&</sup>lt;sup>16</sup> All values are in round figures.

Indicator	Countries	2000	2005	2010	2015	2018	2019
Out-of-pocket expenditure (% of current health expenditure)	Mexico	52.2	54.6	43.5	41	42.3	42.1
	Low-income	51.8	50.8	51	50.2	45.2	45.4
	Lower-middle income	58.6	58.9	56.8	52.9	48.1	48.2
	Upper-middle income	41.2	40.9	33	31.7	32.3	32
	High income	16.2	15.3	14.5	14	13.8	13.6

#### Table 9: Comparative out-of-pocket expenditure, 2020<sup>17</sup>

Source: World Bank, 2020

The states are responsible for allocation of resources but do not have a clear strategy for it. In the absence of an integrated health information system, MoH and Ministry of Finance do not have data on the utilisation of funds, which is a matter of concern. Overspending on health personnel and unauthorised use of SP funds on furniture, medical equipment, etc, were observed (OECD, 2016; Nigenda et al., 2015), impacting accountability and service quality (OECD, 2016).

Some of these challenges have been cited by the new AMLO administration as reasons for the introduction of INSABI, which seeks to recentralise purchasing and provisioning and reduce the private sector's role in healthcare.

In summary, SP was successful in increasing public allocations to health and in reducing both out-of-pocket expenditure and impoverishing health expenditure. It helped reduce the previous gaps in per capita government spending between the insured and the uninsured and led to states undertaking more accurate accounting and rational spending of funds. Public health expenditure increased from 2 percent of GDP in 2000 to 3.2 percent in 2020, out-of-pocket expenditure declined from 52 in 2000 to 42 percent of current health expenditure in 2019, and impoverishing health expenditure fell from 3.3 percent in 2004 to 0.8 percent in 2014.

Despite these improvements, out-of-pocket expenditure remained high at 42 percent, in part due to the limited focus on the delivery system, which led to continuing inequities in access and challenges of accountability. SP's focus on the separation of purchasing from provisioning was well targeted to bringing in greater efficiencies and accountability. Where it fell short in meeting its goals was in not introducing incentives through a "pay-for-performance", which resulted in continuing performance gaps.

### 4. Discussion and insights for comparable countries

SP reforms were aimed at expanding access to health services, especially for the uninsured and poor population, increasing public expenditure on health, reducing out-of-pocket expenses on healthcare, and addressing inefficiencies and accountability in the health system. The reforms demonstrated at least three key shifts: increased insurance cover, increased public expenditure on health, and an altered financing architecture aimed at greater efficiency and accountability. The key aspects of progress included:

- Increased public resource allocation to health from 42.2 percent of total health expenditure in 2005 to 50.7 percent in 2020, demonstrating a political commitment to the sector (Figure 18).
- Increased the number of people covered from 5.4 million in 2004 to 54 million in 2017 (Ruiz, Ratsch, & Martinez, 2018).

<sup>&</sup>lt;sup>17</sup> All values are in round figures.

• Reduced out-of-pocket expenses on health from 54 percent of THE in 2005 to 42 percent in 2020 (Figure 19).

Progress on health outcomes was also visible, but taking into consideration the secular change since the pre-reform period, improvements post-reform declined in terms of the rate of change. Similarly, Mexico saw improvements in infrastructure and the size of the health workforce, but it was neither adequate nor equitable (Figure 20).

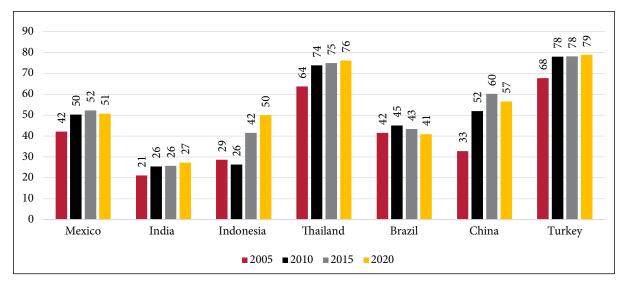


Figure 18: Cross country comparison of public health expenditure<sup>18</sup>

Source: World Bank, 2020; PAHO, 2018; Tatar, et al., 2011; PAHO, 2002; DGIS, 2022; Mahendradhata, et al., 2017; Jongudomsuk, et al., 2015; Turkish Statistical Institute, 2020

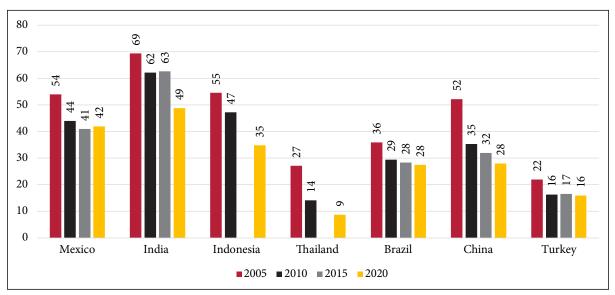


Figure 19: Cross country comparison of out-of-pocket expenditure

Source: World Bank, 2020; PAHO, 2018; Tatar, et al., 2011; PAHO, 2002; DGIS, 2022; Mahendradhata, et al., 2017; Jongudomsuk, et al., 2015; Turkish Statistical Institute, 2020

<sup>&</sup>lt;sup>18</sup> Public expenditure data for India, Indonesia, and China is for the year 2018, and for Thailand and Brazil, 2017 and 2019, respectively. Countries are arranged according to GDP per capita (constant US\$ 2015) 2020.

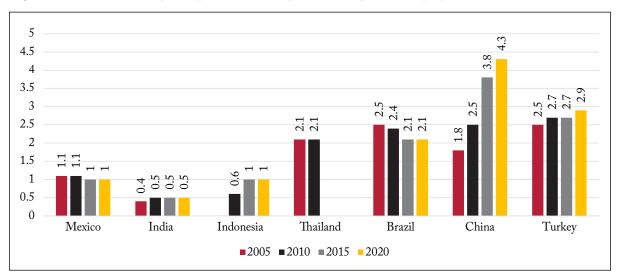


Figure 20: Cross country comparison of hospital beds (per 1,000 population)

Source: World Bank, 2020; PAHO, 2018; Tatar, et al., 2011; PAHO, 2002; DGIS, 2022; Mahendradhata, et al., 2017; Jongudomsuk, et al., 2015; Turkish Statistical Institute, 2020

Alongside the progress on these fronts, a combination of design and implementation challenges surfaced. Learnings from these can be instructive for other countries.

1. Achieving equity remained a challenge after reforms, despite it being a key objective of SP. In Mexico's federal structure, linking fund flows to state contributions implied that the betterendowed states were able to receive larger amounts from the central government. This, in turn, implied that despite the goals of equity across states, large sections of the uninsured population in poorer states remain uninsured, constraining the achievement of UHC. Stability, predictability, and responsiveness of funding are key to ensuring UHC. In this regard, Mexico's success has been limited because of a standardised process of funding that did not take into consideration the fiscal contexts of states and the absence of strong accountability systems. The release of federal funds is contingent on providing proof that adequate funding has been channeled to enlisted beneficiaries by states. With the premium per capita fixed for states, poorer states with longer eligible beneficiary lists often fail to provide such proof, causing delays in fund transfers and gaps in coverage (OECD, 2016). The absence of a standardised package of care and a comprehensive package also contributes to inequities.

The resource allocation mechanism was unable to capture variations in demographics, health needs, and healthcare costs. This affected the equitable distribution of finances and human and physical resources. The resource allocation formula was designed based on population demand rather than actual need and led to states with greater urbanisation and supply of human and physical resources receiving more resources (OECD, 2016). There is potential to explore other metrics such as need, utilisation, and impact to determine flows to states.

2. Another key factor for continuing inequities was the predominant focus on demand. The initiatives were largely targeted at increasing the number of people covered by health insurance and the associated cost of such coverage. The absence of a proportionate focus on the delivery system and its performance in terms of efficiency and quality of care led to persistent gaps in health outcomes and coverage equity. The reforms did not significantly address insufficient physical and human resources, leading to continuing disparities in terms of these aspects across states. A review of norms is critical in addressing shortages in human and physical resources. SP's focus on filling gaps as per prevalent norms did not manage to address the overall inadequacies in resources.

SP focused on gap filling through private providers, who were neither regulated nor incentivised to address equity. The strategy, therefore, resulted in further inequity. The attention to private providers also meant that the public system did not receive the required support.

- 3. Splitting financing and provisioning was a key element of the structural reforms. It was aimed at channelling resources and introducing a healthy tension between providers. While this separated the two key functions, purchasing was not leveraged for improving performance. The absence of conditionality for fund flows, which were de-linked from results, failed to improve accountability or efficiencies. The importance of strategic purchasing is a key learning from SP reforms. Even though the reforms succeeded in separating purchasing from provisioning, the absence of strategic purchasing implied the dilution of quality and accountability. It also lost out on the potential to create competition among public hospitals and public–private facilities.
- 4. SP failed to negotiate with the national workers' union on inserting the pay-for-performance criteria in providers' contracts. As a result, health providers and physicians were not held accountable for funding. The literature suggests that SP did not ensure active participation of the union in the planning and design of the programme. This may have led the union to dictate the physicians' contracts during implementation. This points to the inadequacy of approaches that focus exclusively on insurance cover and risk protection without a complementary and balanced focus on service delivery.
- 5. The SP experience points to the role of institutions and the autonomy required to meet goals. Even though SP ensured the decentralisation of its financial and administrative functioning, it was unable to ensure the institutional autonomy of REPSS across states. The separation of purchasing from provisioning could not work effectively as the purchasing at the state and local levels was carried out under the influence of state secretaries and local managers. Establishing a legal framework for decentralised agencies such as REPSS to secure their financial and administrative autonomy would facilitate the realisation of the objective of separating purchasing from provisioning.
- 6. An integrated information system connecting both state and federal institutions is crucial for accountability. Even though SP came up with guidelines for states to report their expenditure, many did not adhere to the guidelines, predominantly due to the fragmented information structure and system. The system for cross-checking expenditure claims made by each state was poor. An integrated information system could ensure accurate and timely data and help in monitoring the performance of the system. Simultaneously, local managers should be capacitated to produce and analyse information for better planning and decision-making.

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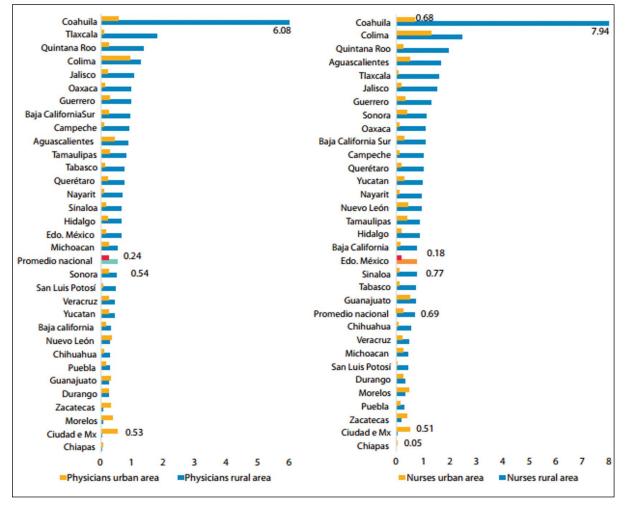
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#### Annex

Figure 1a: Rural/urban density of physicians and nurses per 1,000 inhabitants in primary health facilities, MoH, by state, 2015



Source: WHO, 2017

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