Mexico’s Social Protection System in Health and the Transformation of State Health Systems

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Abbreviations and Acronyms

BP    Benefits Package  
CA    Coordination Agreement  
CNPSS Commission for Social Protection in Health  
CODAMED Entity for medical arbitration  
COEPRIS Entity for the monitoring and prevention of sanitary risk  
COPLAMAR General Coordination for the National Plan of Deprived Zones and Marginalized Groups  
DGPLADES Directorates for Planning and Development in Health  
ECRS Electronic clinical record system  
FMIS Financial management and information system  
GDP Gross Domestic Product  
IMSS Mexican Institute for Social Insurance (Instituto Mexicano para Seguro Social)  
ISSSTE Institute of Social Security and Insurance for Civil Service (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado)  
MIS Management and information system  
OECD Organization for Economic Cooperation and Development  
PHE Public, environment and occupational health  
REPSS State Regimes for Social Protection in Health (Regímenes Estatales de Protección Social en Salud)  
SESA Sistema Estatal de Salud  
SHI State Health Institute  
SICUENTAS Sistema de Cuentas en Salud a Nivel Federal y Estatal  
SINAIS Sistema Nacional de Información de Salud  
SoH Secretariat of Health  
SP Social Insurance (Seguro Popular)  
SPSS System of Social Protection in Health (Sistema de Protección Social en Salud)  
SSA Ministry of Health (Secretaría de Salud)

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A. Introduction

1. As in many low- and middle-income countries, Mexico’s health system is fragmented into different sub-systems with access linked to labor market status. Social security schemes provide health care for formal sector workers and their dependents, while Mexico’s System for Social Protection in Health (SPSS), better known as its pilot and main pillar Seguro Popular (SP), offers health care financial protection to the rest of the population.

2. The SPSS was introduced in 2003 to reduce the substantial inequalities in health and financial protection between Mexicans who have and do not have social security. It complemented the financing arrangements and strengthened the country’s national care health system (NHCS), increasing the availability of public funding, guaranteeing access to explicitly-defined services and making them free at the point of use.

3. In addition, the introduction of the SPSS foresaw deep organizational, institutional and operational changes to state health systems to effectively administer the Seguro Popular, but also to establish provider incentives that promote quality, technical efficiency and responsiveness with new payment systems facilitating the portability of insurance coverage and paving the way for the functional integration of provider networks.

4. This present study aimed to shed light on progress towards the second set of reform objectives, that is, the transformation of state health systems to effectively administer the Seguro Popular and reform the compact of service financing and provision. In the remainder of this paper, we refer to this change process as part two of the 2003 reform.

5. The rationale for the study was two-fold: Most importantly, research has focused on part one of the 2003 reform and little is known about achievements in part two. Furthermore and again in contrast to part one, the legal, regulatory and supervision framework provides federal entities with a high degree of freedom in the design and implementation of part two of the reform.

6. The study has been carried out in close collaboration with the National Commission for Social Protection in Health, the Federal Ministry of Health and State Health Systems. It is part of a series of World Bank research pieces that intend to provide new insights into the many successes of Mexico’s 2003 health sector reform, but also the remaining challenges facing the health system serving Mexicans without social security.

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1 Our thanks go to the representatives and staff of the Directorates for Planning and Development in Health (DGPLADES) and the State Regimes for Social Protection in Health (REPSS) of the participating states and the federal district. We are particularly indebted to representatives and staff of the Health Secretariats of Jalisco, Oaxaca and Tabasco for participating in the study pilot.
7. This paper is structured as follows. After this introduction, the paper provides a digest of the reform history, including details about the 2003 reform plans. It follows a summary of the study approach, including a definition of the reform’s point of departure, its vision and the critical pathways. Then, it presents the key findings and closes with a discussion and conclusions.

B. Reform History

8. Since the early 1980’s, Mexico’s national health system has undergone three major reform waves prompted by the establishment of health protection as a constitutional right. Four decades of sustained economic growth since the 1940’s had done little to reduce deep socio-economic inequalities. Wide-spread dissatisfaction and distrust prompted a debate about a vision for a new social contract and resulted in a series of legislative actions to create a more egalitarian society. Most prominently, Mexico adopted a constitutional amendment establishing the right of every citizen to the protection of her health. As stipulated in the amendment, Congress approved shortly thereafter a general health law to interpret the amendment and define the policies towards the realization of the right to health. This new legal framework entailed five major reform dimensions with the decentralization of health services the central one. Following the passing of the law, two presidential decrees determined the rules to govern the decentralization process. The proposed transfer of decision making power to the 31 states and the federal district had been an electoral promise and seen as a means to reduce inequities and inefficiencies in the public health system. Over the next three decades, it prompted three waves of radical change for Mexico’s national health system.

9. The first reform wave initiated the decentralization process and resulted in 16 federal entities establishing state health systems and operating integrated state health services by 1988. While the general health law defined the distribution of competences between the federal government and the states, including new organizations and institutions to be established at the decentralized level such as the state health system, ministries of health as their governing bodies and state health services, the presidential decrees stipulated a gradual process governed by coordination agreements between the federal and state governments. In practice, the decentralization process unfolded in two stages. In a first step states defined the regulatory framework for the Sistemas Estatales de Salud (SESAs) and built capacity to carry out key functions. Only if states met 14 critical milestones, such as defining SESA’s, formulating a state health law and establishing procurement, HR, information (including surveillance) and referral and counter-referral systems, they could advance to step two, which entailed the decentralization of two major federal systems for Mexican’s without social security, the SSA operated coordinated health services and the IMSS managed COPLAMAR program and their merger with state operated networks to constitute state health services. The process came to a halt with the presidential elections and change of government in 1988. By then, 14 states, most of them with higher levels of socio-economic development and institutional capacities, had advanced to stage two of the reform

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process and started to autonomously operate state health services; in contrast, 17 mainly poorer states and the federal district did not complete the process of establishing the required regulatory frameworks and levels of capacity.

10. The second reform wave completed the decentralization of health service provision and sanitary control to all federal entities, also providing greater budget autonomy and flexibility and planting the seeds for the democratization of the system. In 1996, the federal government and states signed a decentralization agreement and subsequently negotiated coordination agreements, both of which provided additional granularity to the stipulations of the general health law, in particular, about roles and responsibilities of the federal and state governments. Coordination agreements also set fewer conditions for the transfer of SSA operated health services to the states. The refined approach facilitated the rapid transfer of the responsibilities for health service provision and sanitary control to the remaining 17 states and the federal district but resulted in greater diversity among governing bodies (ministries of health, ministries of social development with departments of health, or health institutes themselves) and did not involve IMSS, leaving the COPLAMAR provider networks independent of state health services. Moreover, a period of economic growth facilitated steps towards full budget autonomy and flexibility to allow states responding increasingly to local health needs. In co-signing the decentralization agreement, health worker unions agreed to the transfer of the payroll to states. An amendment to the fiscal coordination law created a budget line to transfer funds directly and without predetermined caps on spending categories to states. Finally, federal transfers grew significantly with allocations drawing on historical spending patterns (payroll and infrastructure maintenance) but corrected for mortality rates and levels of socio-economic deprivation. In addition, an amendment to the General Health law fostered the democratization of the health system through the establishment of the Federal Commission for Medical Arbitration with the mandate to support states in setting up similar institutions.

11. The third reform wave - the 2003 reform – introduced the SPSS and pursued two different sets of objectives. First, the reform aimed to transform resource allocation mechanisms and introduce explicit entitlements to improve financial equity, allocative efficiency and financial protection. Federal and state contributions to the premium of the Seguro Popular on the basis of initially per-family and later per-capita quota would replace historical budgets to increase public financing of state health services and reduce horizontal fiscal imbalances. Guaranteed access to a package of highly-cost effective benefits would enhance the allocative efficiency of the national health system and, combined with the elimination of user fees, improve the financial protection of members.

12. Second, the reform aimed to transform provider incentives to promote quality, technical efficiency and responsiveness with new payment systems facilitating the portability of insurance coverage and paving the way for the functional integration of public provider networks. In sync with a

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3 These 14 states included Aguascalientes, Baja California Sur, Colima, Estado de México, Guanajuato, Guerrero, Jalisco, Morelos, Nuevo León, Querétaro, Quintana Roo, Sonora, Tabasco, and Tlaxcala.
global reform trend to make ‘money follow the patient’, the strategic purchase of services in lieu of relying on state-owned providers - including the replacement of budgets with performance based payment systems - would allow patients choosing among providers, make the supply more competitive, and promote the quality and efficiency of services. New payment systems would provide mechanisms to compensate federal entities for the delivery of services on behalf of each other, thus, ensuring the portability of the insurance coverage within the federation. The strategic purchase of services would draw on all public provider networks, thus virtually integrating the networks of state health systems, IMSS and ISSSTE, improve access to services and, in the long-term, allow streamlining the service delivery infrastructure.

13. **Successful implementation of the 2003 reform required deep organizational, institutional and operational changes to state health systems.** New institutions and operational procedures would have to be adopted - from the affiliation of families to the contracting of provider networks. In turn, provider networks had to be prepared to sell their services. System stewardship/oversight had to be strengthened, from regulating new functions to reporting on system performance. The effective working of this model required core health system functions to be operated at arm’s length, in other words, the organizational separation of the steward, financier, and servicer provider.

14. **The 2003 reform was enacted with changes to the general health law and new by-laws focusing on the first set of reform objectives.** The changes to the law and its new by-laws introduced and regulated the SPSS and its main pillar the Seguro Popular, its stipulations focusing on the financing arrangements, national affiliation targets, and the benefits package. In contrast, they left federal entities with a high degree of freedom in terms of the organization and operation of state health systems. The law referred broadly to state health systems and their responsibilities, making specific references only to the Regímenes Estatales de Protección Social (REPSS) and their responsibilities and requiring the Federal Commissions for Medical Arbitration and Sanitary Risks (established in 2001) to support federal entities in setting up similar institutions. The Law and its by-laws, however, did not stipulate the legal status of any of these entities and only one by-law provided a vague reference to the ‘separation’ of the financing and provision of health care. The law also created the Comisión Nacional de Protección Social en Salud (National Commission of Social Protection in Health of CNPSS) with the mandate to oversee the implementation and operation of the SPSS. With a similar emphasis as the general health law, implementation agreements between the CNPSS and federal entities - so-called acuerdos de coordinación - and corresponding supervision arrangements focused on affiliation targets and spending patterns.

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4 With institutions, we refer to the formal ‘rules of the game’.
C. Study Approach

15. The study aimed to assess advancements in the organizational and functional transformation of state health systems. More specifically, it aimed to map the status quo along different reform dimensions in as many federal entities as possible. Comparing these maps would allow assessing reform progress, including an attempt to classify state health systems and correlate progress with antecedents and performance indicators. In addition, these maps would establish baselines to assess reform progress of individual federal entities over time.

16. The study hinged on the development of critical reform pathways leading from the arrangements prevailing prior to the launch of the reform to those envisaged in the reform design. We developed these sequences of transformational changes in three major steps. First, we established stylized models of the arrangements prevailing in state health systems prior to the introduction of the SPSS based on the literature, earlier versions of the General Health Law, government documents, and interviews with key stakeholders. Second, we established a stylized model of the arrangements envisaged in the 2003 reform based on the General Health Law, its by-laws, policy documents, the literature and interviews with key stakeholders. Finally, we developed sequences of key changes leading from the models prevailing prior to 2003 towards the model envisioned in the 2003 reform.

17. The final study design included four critical pathways to capture organizational change and functional change in system stewardship, service financing and service provision according to 5 levels of progress. A few characteristics of these pathways are important to note: First, functional change entailed both institutional and operational change, the former defined as change in the formal rules of the game, commonly a regulatory act of the health system’s steward. Second, operational change was commonly framed as the introduction of a new way of doing business. The lack of data made it often impossible to gauge implementation progress. As such, achieving level 5 in operational aspects may require years of additional effort to fully implement change. Finally and most importantly, the sequencing of reform steps did not assume that organizational and institutional change necessarily precedes operational change. First, organizational change proved not to be a necessary condition for functional change. Second, when framed as the introduction of a new way of doing business, operational change often occurs as a test or pilot designed to inform the reform design, including institutional change.

18. On the basis of the critical pathways, the study mapped and compared organizational and functional change for 18 out of 32 federal entities based on data collected between December 2010 and May 2012. The development of the critical pathways benefitted from iterative, extensive consultations with almost all federal entities during 2008 and 2009. The final versions of pathways were translated into questionnaires, which were tested in a pilot and revised early in 2010. With the active participation of Secretariats of Health and State Health Institutes, data was collected from 18 out of 32 federal entities between December 2010 and May 2011. Data was triangulated and reconciled with information gathered from state health laws, operational manuals, information provided by the Federal
Secretariat of Health and the literature. The data analysis included the mapping of organizational and functional change for each federal entity, the comparative analysis of progress across federal entities, and the testing for correlations between progress, antecedents and performance indicators.

**Part Two of the 2003 Reform – Point of Departure and Vision**

19. The first and second reform waves had left state health systems with a diverse set of highly integrated organizational set-ups operated under similar institutional and operational arrangements. Systems were governed by state health laws and headed by ministries of health, ministries of social development or state health institutes. Similarly, ministries of health, ministries of social development, the state health institutes, or the combination of a ministry and a state health institute served as the local sanitary authority. Ministries and/or state health institutes operated information systems that allowed reporting on the prevalence of key diseases. Few state health systems had set up entities for medical arbitration. Both ministries and state health institutes financed (on an input basis) and operated state health services with jurisdictions often assuming a central role in the management and administration of services. In roughly half of all federal entities, the state health services had absorbed the provider network of the IMSS COPLAMAR program. The delivery capacity of the state health services determined the citizens’ access to health care.

20. The 2003 reform foresaw a state health system model with an organizational separation of the stewardship, financing, and provision roles and transformed as well as introduced new system functions. In this model, the key organizations are the ministry of health, the REPSS and state health institutes:

The ministry of health serves as the steward and sanitary authority of the state health system. It establishes, supervises and monitors, and eventually sanctions non-compliance with policies and regulatory frameworks in the areas of health financing and health service delivery, including policies and regulatory frameworks governing the benefits package, tariffs, affiliation of members, and the accreditation and contracting of services. In addition, it monitors and reports the overall system performance. As the state level sanitary authority, it operates public, environmental and occupational health services. It administers these services through jurisdictions that constitute administrative units of the ministry; furthermore, through a deconcentrated entity (commonly named the Commission for Sanitary Risks), it monitors and takes actions to prevent sanitary risks. The role of the ministry as steward of the system is complemented by a decentralized entity for medical arbitration (commonly named the Commission for Medical Arbitration) that monitors user satisfaction with services, receives, investigate, resolves and reports user complaints about both the availability and quality of services.

The REPSS is the prime financier of the Seguro Popular, enrolling members and purchasing services to ensure their access to quality services. It is a decentralized state organization with full financial and decision autonomy. It enrolls families as members into the SPSS, ensures their knowledge of entitlements and manages the authorization of high-cost, complex interventions. Furthermore, it accredits and purchases health services from public and private health care providers, using payment mechanisms that promote the efficiency of services, including their quality. As such, it executes the
largest share of the state health system budget and ensures the access to quality services for SPSS members.

State Health Institutes are key but not exclusive service providers, competing with other networks, including the sale of their services to other sub-systems, on the basis of service quality and prices. They are decentralized state organizations with full decision authority, including financial autonomy. They have effective management structures, including information systems that constantly improve the quality, efficiency, and financial sustainability of services and sell them to REPSS and other sub-systems.

**Critical pathways**

21. **A set of four critical pathways developed in close cooperation with representatives from state health systems laid out a sequence of milestones connecting the reform’s point of departure with its vision** [Annex 1]. A first pathway described a sequence of necessary organizational changes. At the center of this development was the break-up of the highly integrated organizational structure of Secretariats of Health and State Health Institutes; furthermore, the establishment of entities for financing and medical arbitration as fully decentralized bodies and the establishment of jurisdictions as administrative unites providing public, occupational health services and deconcentrated units for the sanitary risk monitoring and prevention within the structure of the ministry of health. A second pathway described a sequence of changes to strengthen oversight. This entailed the increasingly comprehensive monitoring of system performance, including medical arbitration, and establishment and enforcement of regulatory frameworks governing the financing and provider compact. A third pathway described a sequence of changes to strengthen health care financing, including processes of affiliation and service authorization, but a focus on steps towards the strategic purchase of services. Finally, a fourth pathway described a sequence of changes to strengthen the management and operation of service provision with a focus on the establishment of information systems, the use of data and eventually the sale of services to other provider networks.
D. Key Findings

Progress across Federal Entities

Organizational Change

22. At the time of the assessment, the majority of federal entities had established all key bodies of state health systems, but as part of a highly integrated organizational structure (level 2, group II) that served de jure and de facto as the steward, financier and provider of personal and public health services (table 1). These structures comprised ministries of health and state health institutes sharing the same management and operational structures with jurisdictions and entities for the management of sanitary risks and financing as administrative and/or deconcentrated units. Divergent from this high-level of organizational integration, the majority of federal entities had established the entity for medical arbitration as a decentralized body. In addition, legal and regulatory frameworks entailed first elements separating the role of the secretariat of health (health policy making, sanitation) and the state health institutes (service provision).

23. Some of these state health systems had made some, but not consistent, strides towards a more differentiated organizational model. Three states had adopted legal frameworks that established the SoH as the exclusive authority of both health policy making and sanitation. Four states had adopted legal frameworks that established the state health institutes as the exclusive authority for health care provision. Contrary to the legal frameworks, however, in all of these states, both SoH and SHI continued to share the same managerial and operational structure and to provide health care services.
Table 1: Organizational change by state

| Milestones                                      | BC | CHI | CHA | COL | DF | DGO | GTO | HGO | JAL | MOR | NAY | OAX | QRO | SIN | SLP | TAB | YUC | ZAC | Lw | High | Avg |
|------------------------------------------------|----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| **1** SHI - established                        | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |    |     |     |
| Jurisdictions - administrative units of SHI    | x  |     |     |     | x  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| COEPRIS - administrative unit of SHI           | x  |     |     |     |     | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| REPSS - administrative unit of SHI             |     |     |     |     |     |     |     | x   |     |     | x   |     |     |     |     |     |     |     |     |     |     |     |
| COAMED - administrative unit of SHI            | x  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| **2** SoH established                          | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |    |     |     |
| Jurisdictions - administrative units of SoH    | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |     |     |     |     |     |     |     |     |
| SoH/SHI - management structure - de jure       | x  |     |     |     | x  |     |     |     |     | x   |     |     |     |     |     |     |     |     |     |     |     |     |
| SoH/SHI - operational structure - shared       | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |     |     |
| Jurisdictions - administrative units of SoH/SHI| x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |     |
| COEPRIS - administrative unit of SoH/SHI       | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| REPSS - administrative unit of SoH/SHI         | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| COAMED - decentralized unit of SoH/SHI         | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| **3** SoH/SHI exclusive authority for health service provision | x  | x   |     |     |     | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| SoH exclusive health policy authority          | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |     |     |     |     |     |     |     |     |
| SoH exclusive sanitary authority              | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |     |     |     |     |     |     |     |     |
| Jurisdictions - administrative units of SoH    | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| SoH/SHI - management structure - de facto      | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| Jurisdictions - deconcentrated units of SoH/SHI| x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| COEPRIS - deconcentrated unit of SoH/SHI       | x  | x   | x   | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| REPSS - deconcentrated unit of SoH/SHI         |     |     |     |     |     | x   | x   | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |
| **4** SoH/SHI - operational structure - separate | x  | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Jurisdictions are administrative units of SoH  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| COEPRIS - deconcentrated unit of SoH           | x  | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| REPSS - administrative / deconcentrated unit - SoH | x  | x   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| COAMED - decentralized                         | x  | x   | x   | x   | x  | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   | x   |
| **5** SoH/SHI - management structure - separate | x  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| SHI exclusive health service provider          | x  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| REPSS - decentralized                         | x  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

**Abbreviations**:  
Avg: Average; BC: Baja California; CHI: Chihuahua; CHA: Chiapas; COAMED: Entity for medical arbitration; COEPRIS: Entity for the monitoring and prevention of sanitary risk; COL: Colima; DF: Distrito Federal; DGO: Durango; GTO: Guanajuato; Hgo: High; HGO: Hidalgo; JAL: Jalisco; MOR: L: Level; Lw: Low; Morelos; NAY: Nayarit; OAX: Oaxaca; PHE: Public, environment and occupational Health; QRO: Queretaro; REPSS: State Regime for Social Protection in Health; SHI: State Health Institute; SIN: Sinaloa; SLP: San Luis de Potosi; SoH: Secretariat of Health; TAB: Tabasco; YUC: Yucatan; ZAC: Zacatecas.

**Note**: Low (Lw) and high (High) reflect scenarios to determine sub-par (highlighted in light grey) and above average performance (highlighted in dark grey).
24. Other state health systems had yet to advance to the mainstream model (level 1, group I). Three states (Durango, Querétaro, Yucatán) lacked steps along a couple of dimensions: They had yet to establish the entity for medical arbitration or establish it as a decentralized body; in addition, the legal frameworks of Durango and Querétaro stipulated a joint managerial structure for the SoH and SHI. Sinaloa fell further short of the mainstream model; its legal framework lacking any elements separating the role of the SoH and SHI. Zacatecas represented the lower end of the spectrum, lacking both a secretariat of health and an entity for medical arbitration.

25. In contrast, the two state health systems of Chihuahua and Baja California had advanced towards substantially more differentiated organizational arrangements (level 2 to 3, group III). The state health system of Chihuahua had separated both mandates and organizational structures of the secretariat of health and the state health institutes. Its legal framework established the secretariat of health as the exclusive health policy making body and the sanitary authority and the state health institutes as the exclusive service provider. SoH and SIH had independent management and operational structures, and the SIH served de facto as the only public provider of personal health care services. The only limitation to this clear-cut separation was that both SoH and SIH oversaw jurisdictions. It is notable that also the Federal District had adopted separate operational structures for the SoH and SHI, though without a clear separation of its mandates and under a joint managerial arrangement. Baja California stood out as the most advanced federal entity in terms decentralizing core functions, having established both the REPSS and the entity for medical arbitration as a decentralized body.

**Functional Change**

26. At the time of the assessment, the majority of federal entities had taken a core set of steps to transform the institutional and operational arrangements of their state health system (level 2, group II) (table 2). They had strengthened system oversight, with state health systems reporting the effective coverage of diseases and key features of medical arbitration. They had put in place regulation for the purchase of medicines and mechanisms to adapt the SP benefits package to local conditions. They had initiated the transformation of health financing arrangements with systems taking on core insurance functions such as the development and implementation of communication strategies to inform insured individuals about their entitlements and the authorization of complex health care interventions. In addition, they had introduced coordination agreements and/or contracts including performance criteria for the provision of personal health care services through state health institutes. Finally, they had strengthened the management and functioning of their provider systems, operating management information systems and introducing ERCS at least at one level of care.

27. Some of these federal entities had taken additional, but not yet comprehensive actions to transform key health system functions. Twelve states had put in place further pieces of legislation and regulation to govern the financing of health services, for example, rules for the affiliation of families and/or the accreditation of health care providers. Eleven had entered into coordination agreements and contracts with non-state health system providers (e.g. IMSS, ISSSTE, private providers) to improve
the access to services; furthermore, ten had entered into coordination agreements and contracts to provide services on behalf of social security institutes.

28. Other federal entities had yet to implement some of these steps (level 1-2, group I). Guanajuato, Hidalgo, Morelos and Zacatecas lacked processes and systems to adapt the SP benefits package. In addition, Zacatecas and Hidalgo had yet to report on medical arbitration, Hidalgo also to regulate the purchase of medicines, and Morelos to design and implement a communication strategy to inform members about their entitlements and to introduce ERCS at any level of care. Guanajuato had fallen further behind, lacking progress on almost all accounts.

29. In contrast, few federal entities demonstrated comprehensive institutional and operational change (level 2 to 3, group III). While none of the federal entities stood out in terms of transforming system oversight, Chiapas and Jalisco demonstrated comprehensive progress towards the strategic purchase of services. Both federal entities had put in place regulation for the contracting of service providers and established contracts that included financial incentives for service productivity and/or efficiency not only with state health institutes, but also IMSS/ISSSTE (Chiapas) or private health care providers and pharmacies (Jalisco). Chihuahua and Querétaro had taken significant steps to enhance the management of service provision, both complementing management information systems with ECRS at all levels of care. Queretaro had also entered into agreements/contracts to provide services on behalf of IMSS and ISSSTE. Across the three dimensions of stewardship, financing, and provision, Chiapas and Jalisco had advanced most comprehensively, but still with significant gaps. For example, like any other federal entity, they continued to lack mechanisms to sanction REPSS with regulation of provider accreditation, service tariffs and management and financial management information systems across all levels of care.

**Progress within State Health Systems – Deviations and Variations**

30. The critical pathways of the analytical framework for functional change did not constitute the only way forward; however, federal entities demonstrated at least three major deviations that may hamper progress, sustainability and/or impact of the reform in the medium and long-term. First and foremost, at the time of the assessment, all participating federal entities had enrolled more than 62% percent of households, but only three had regulated affiliation, implemented communication strategies to inform members about entitlements, and monitored and reported member complaints (Federal District, Nayarit and Tabasco). Second, several states had started to purchase services under payment arrangements with productivity/efficiency incentives from IMSS/ISSSTE (Nayarit) or private health care providers and private pharmacies (Durango, Oaxaca, Yucatán). However, none had introduced such performance-based arrangements with state health institutes, furthermore, Nayarit and Yucatan had done so without putting any corresponding regulation in place. Finally, several federal entities had entered into agreements and contracts with IMSS and/or ISSSTE to provide services on their behalf (Baja California, Jalisco, San Luis Potosí, and Tabasco), but without taking critical steps to enhance their management information systems and, with the exception of Jalisco, regulating the contracting process.
Table 2: Functional change by state

<table>
<thead>
<tr>
<th>States</th>
<th>Lw</th>
<th>SH</th>
<th>Fh</th>
<th>PH</th>
<th>FuH</th>
<th>Avg</th>
</tr>
</thead>
</table>

**Stewardship**

1. SC - reporting - prevalence of key diseases
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

2. SC - adapting BP
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

3. Reporting - medical arbitration - complaints
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

4. Reporting - effective coverage of key diseases
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

5. Regulation - affiliation
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

**Financing**

1. Communication strategy - enrollee - entitlements
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

2. System for authorization of complex interventions
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

3. CA or CON with SHI's
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

4. CA or CON with IMSS or ISSSTE
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

5. CA or CON with private pharmacies
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

**Provision**

1. MIS - any level of care - operational
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

2. FMIS - any level of care - operational
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

3. MIS - all levels of care - operational
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

4. FMIS - all levels of care - operational
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

5. Financial sustainability analysis - all levels of care
   - BC: x
   - CHI: x
   - CHA: x
   - COL: x
   - DF: x
   - DGO: x
   - GTO: x
   - HGO: x
   - JAL: x
   - MOR: x
   - NAY: x
   - OAX: x
   - QRO: x
   - SIN: x
   - SLP: x
   - TAB: x
   - YUC: x
   - ZAC: x

**Abbreviations:** Avg: Average; BC: Baja California; BP: Benefits package; CA: Coordination agreement; CHI: Chihuahua; CHA: Chiapas; COL: Colima; CON: Contract; DF: Distrito Federal; ECRS: Electronic clinical record system; DGO: Durango; FH: Financing high; FMIS: Financial management and information system; FuH: Functional high; GTO: Guanajuato; HGO: Hidalgo; JAL: Jalisco; MOR: L: Level; Lw: Low; MIS: Management and information system; MOR: Morelos; NAY: Nayarit; OAX: Oaxaca; PH: Provision high; QRO: Queretaro; REPSS: State regimes for social protection in health; SH: Stewardship high; SHI: State Health Institute; SLP: San Luis de Potosi; SoH: Secretariat of Health; TAB: Tabasco; YUC: Yucatan; ZAC: Zacatecas.

**Note:** Low (Lw) and high (Hgh) reflect scenarios to determine sub-par (highlighted in light grey) and above average performance (highlighted in dark grey).
31. In federal entities demonstrating significant functional change, progress tended to be inconsistent across health system functions. Among twelve federal entities with significant functional change (index approximately or greater 1.0), seven showed substantial variations across system oversight, service financing and provision (variation of index greater than 0.7) with no clear pattern emerging. Chihuahua and Querétaro had advanced disproportionately in strengthening the management of service provision, with Querétaro showing little progress in transforming stewardship and financing at all. Durango and Oaxaca had progressed disproportionately in strengthening both oversight and financing and Jalisco, Sinaloa and Yucatán in transforming financing.

32. Furthermore, organizational, institutional and operational change was uneven within health system functions and sub-functions. While organizational change (level 1.8) seemed on average more advanced than functional change (level 1.2), comparisons for a wide array of health functions and sub-functions did not expose any correlation between organizational, institutional or operational change. For example, nine federal entities had established commissions for medical arbitration as decentralized bodies; however, only five of them reported about their work. In turn, four federal entities had yet to establish a commission for medical arbitration, but reported the number of complaints. Likewise, three federal entities operated REPSS as deconcentrated or decentralized units, but lacked comprehensive regulation of health financing and demonstrated average or subpar progress in the strategic purchase of services. In contrast, the four federal entities that had put in place comprehensive regulation of health financing and advanced in the strategic purchase of health care services operated REPSS as administrative units within the combined structure of ministries of health and state health institutes.

Clusters, antecedents and performance

33. The analysis pointed to six clusters and three groups of state health systems with different levels of progress along the dimensions of organizational and functional change (1 In the remainder of the paper, we will refer to catastrophic health expenditures as catastrophic expenditures. (table 3) A first cluster included five state health systems with average progress for both organizational and functional change. A second cluster included only one state with subpar progress on both dimensions. Two clusters consisted of two states each with advanced progress in either organizational or functional change. The final two clusters included four state health systems each with sub-par progress in either organizational or functional change. Combining organizational and functional change, the six clusters could be merged into three groups of state health systems with group 1 including states with sub-par progress (clusters 1, 2 and 3), group 2 with average progress (clusters 4) and group 2 with above average progress (clusters 5 and 6).

34. Progress in one of the two dimensions or the combination thereof did not correlate with early participation in the reform process, political change or economic development; however, there seemed to be a link to the commitment of states to finance health services (table 3 and 4). The six federal entities that had participated in the first wave of reform did not stand out as more advanced, with four of them falling into group 1 and half of them falling into cluster 2. Likewise, the eight federal
entities that had seen an early departure from the historical one-party dominance (i.e. before change at the federal level in 2000) did not show a consistent edge over other federal entities with four of them falling into group one, three of them falling into group three and a homogenous distribution of them across all clusters. This pattern did not change when stratifying for the type of political change (i.e. from PRI to PAN (center-right), coalition or PRD (left)). In addition, federal entities with a high GDP per capita did not consistently outpace federal entities with low GDP per capita. From the five economically most developed federal entities, one fell into group 3, two into group 2, and two in group 3. Furthermore, cluster 4 had the highest average GDP per capita. However, federal entities with high shares of state health financing seemed to also show deeper organizational and functional change. From the five federal entities with the highest shares of state health financing, three fell into group 3 and 2 into group 2. Furthermore, group 3 as well as clusters 5 and 6 had the highest average share of state health financing. Chiapas was a notable exception. While having the lowest GDP per capita and one of the lowest shares of state-level health financing among the 18 states, it had achieved average organizational and above average functional change.

35. In turn, progress in any of the two dimensions or the combination thereof also did not correlate with indicators of state health system performance (table 3). For example, the four federal entities with the deepest organizational and functional change (group 3) ranked 7th, 10th, 12th, and 13th in terms of waiting times for outpatient services with an average of 21 minutes that was slightly below the average for the group of 18 federal entities. Likewise, they ranked 2nd, 5th, 7th and 15th in terms of medicines delivered when prescribed with an average of 86 percent that was identical to the average for the group of 18 federal entities.

Table 3: Clusters of state health systems according to organizational and functional Change – Correlation with reform process and political change

<table>
<thead>
<tr>
<th>Functional change</th>
<th>Group</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td></td>
<td>Cluster 3: Durango/*, Querétaro/**, Sinaloa, Yucatán</td>
<td>Cluster 4: Distrito Federal/**<em>, Nayarit, Oaxaca, San Luis de Potosí, Tabasco</em></td>
<td>Cluster 5: Baja California/*, Chihuahua</td>
</tr>
<tr>
<td>I</td>
<td>Cluster 1: Zacatecas***</td>
<td>Cluster 2: Colima*, Guanajuato/<em>, Hidalgo, Morelos/</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *: Federal entity obtained authority for health service delivery prior to 1988; **: Federal entity with democratic transition from PRI to PAN or coalition prior to 2000; ***: Federal entity with democratic transition from PRI to PRD prior to 2000.
Table 4: Clusters of state health systems according to different levels of organizational and functional change – Comparison with state-level health financing, economic development and selected health system performance indicators

<table>
<thead>
<tr>
<th>Groups of State Health Systems</th>
<th>State-level health financing as a share of total health financing* [%]</th>
<th>GDP per capita** [MX$ 2009]</th>
<th>Medicines delivered as a share of medicines prescribed*** [%]</th>
<th>Average waiting time for outpatient services**** [minutes]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>14.5</td>
<td>97,070</td>
<td>86.0</td>
<td>24</td>
</tr>
<tr>
<td>Organizational Change Level I</td>
<td>11.5</td>
<td>94,010</td>
<td>85.3</td>
<td>22</td>
</tr>
<tr>
<td>Organizational Change Level II</td>
<td>12.4</td>
<td>98,720</td>
<td>85.6</td>
<td>27</td>
</tr>
<tr>
<td>Organizational Change Level III</td>
<td>35.2</td>
<td>100,630</td>
<td>86.7</td>
<td>18</td>
</tr>
<tr>
<td>Functional Level I</td>
<td>6.1</td>
<td>82,540</td>
<td>85.7</td>
<td>21</td>
</tr>
<tr>
<td>Functional Level II</td>
<td>17.9</td>
<td>107,740</td>
<td>86.2</td>
<td>26</td>
</tr>
<tr>
<td>Functional Level III</td>
<td>16.4</td>
<td>74,750</td>
<td>85.4</td>
<td>24</td>
</tr>
<tr>
<td>Cluster 1</td>
<td>6.9</td>
<td>72,860</td>
<td>89.5</td>
<td>17</td>
</tr>
<tr>
<td>Cluster 2</td>
<td>5.9</td>
<td>84,960</td>
<td>84.8</td>
<td>23</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>11.7</td>
<td>96,830</td>
<td>85.9</td>
<td>22</td>
</tr>
<tr>
<td>Cluster 4</td>
<td>16.0</td>
<td>119,310</td>
<td>86.2</td>
<td>32</td>
</tr>
<tr>
<td>Cluster 5</td>
<td>35.2</td>
<td>100,630</td>
<td>86.7</td>
<td>18</td>
</tr>
<tr>
<td>Cluster 6</td>
<td>16.4</td>
<td>74,750</td>
<td>85.4</td>
<td>24</td>
</tr>
<tr>
<td>Group 1 (Clusters 1, 2 and 3)</td>
<td>8.8</td>
<td>90,900</td>
<td>85.3</td>
<td>23</td>
</tr>
<tr>
<td>Group 2 (Cluster 4)</td>
<td>16.0</td>
<td>119,310</td>
<td>86.2</td>
<td>32</td>
</tr>
<tr>
<td>Group 3 (Clusters 5 and 6)</td>
<td>25.8</td>
<td>87,690</td>
<td>86.0</td>
<td>21</td>
</tr>
</tbody>
</table>

Sources: *Informe de Resultados 2010 CNPSS, SINAIS (Sistema Nacional de Información de Salud) 2010 and SICUENTAS (Sistema de Cuentas en Salud a Nivel Federal y Estatal), 2010

E. Discussion and Conclusions

36. In comparison to part one of the 2003 reform, progress in advancing part two had been limited. While in 2011 the SPSS covered close to 87.6 percent of its target population and increases in public financing and changes to federal resource allocation rules had produced impressive results (World Bank, 2011), state health systems showed few uniform departures from their pre-reform organizational, institutional and operational arrangements. New organizational entities such as REPSS had been established, but mostly as part of highly integrated organizational structures without much autonomy. New entities and functions remained incompletely regulated and steps towards a performance based financing and strategic purchasing and vending of services nascent. Research is needed to elucidate the reasons behind limited progress in reform part two; yet, the review of reform documents pointed to a couple of factors that may explain the implementation gap between part one and two. Most importantly, reform part one hinged on federal action but part two on state level action. Accordingly, part one was articulated in detail in the general health law; in contrast, references to part
two in the law remained limited to the roles and responsibilities of new and old state health system bodies. In addition, in the implementation of part one, the federal government refrained from enforcing the compliance of federal entities with some of their responsibilities, for example, the use of SPSS resources for accredited provider units only.

37. While overall progress in implementing part two of the reform had been limited, it varied substantially across federal entities, a fact, that requires consideration in the re-emerging debate of inequalities in health. Some federal entities had advanced almost half-way along the critical pathways for organizational or functional change. Others seemed almost completely stuck with pre-reform arrangements. This variation seemed independent of state level party politics; moreover, independent of advancements in earlier reform waves. It also did not seem to correlate with indicators of state health system performance. This, however, did not come as a surprise. As discussed earlier, critical pathways commonly framed operational change as the introduction of a new way of doing business with full implementation most likely requiring additional years of implementation effort. Moreover, the impact of organizational and functional change may only unfold after lag times that are significantly longer than the reform period. The observed variation seemed independent on the level of economic development but advancements consistent with a federal entities’ commitment to co-finance health services. Therefore and with the limitations discussed below, reform part two as a means to improve state health system performance should be considered in the debate of inequalities in health outcomes. This debate is currently regaining momentum as performance gaps persist despite the SPSS’ impact on fiscal imbalances. The diversity in progress and richness in resulting experiences and lessons learned could, if harnessed, prove helpful in advancing the reform agenda.

38. Progress also varied significantly within state health systems, that is, it varied across and within reform dimensions, including major deviations from critical pathways that raise concerns about the reform process. While the sequencing of reform steps laid out in the critical pathways did not constitute the only way forward, federal entities exhibited three major deviations that potentially hamper the sustainability and/or impact of the reform. The frequency of these deviations suggests that federal entities adopted at best a muddling-through, if not ad-hoc approach to reform and, in turn, begs the question why policy-makers did not adopt more coherent and comprehensive reform strategies.

39. First, progress was often inconsistent across organizational and functional dimensions. More specifically, organizational change did not necessarily trigger functional change and, at the same time, functional change did not necessarily require organizational change. The incidence of the former was too frequent to simply discount it as an artifact of the cross-sectional design. The latter may be at times warranted, as functional and in particular operational change is more likely to cause immediate impact and often politically less contentious; however, functional change may not be as effective without organizational change, for example, the enforcement of regulation and contractual agreements within one or between two independent organizations.

40. Second, progress was often inconsistent across health system functions. For example, progress in oversight did not coincide with progress in financing and provision and progress in financing with
progress in provision. Again, the incidence of inconsistencies was too frequent, in addition, the gaps too significant to discount the disconnections as artifacts of the cross-sectional design. The possible implications are two-fold. Change may not produce the maximum of results if it happens in isolation, for example, if oversight is strengthened without improvements in operational aspects or financing mechanisms enhanced without improvements in the management of services. At the same time, change may neither be scalable nor sustainable if operational aspects are strengthened without enhanced oversight.

41. Third, at times, progress included leaps that omitted achieving key milestones. For example, state health systems started to sell services prior to putting in place information management systems that would allow them to determine meaningful price systems. In the case of these leaps, change may cause unintended consequences; moreover, it may prove not scalable and/or sustainable.

42. While the 2003 reform certainly encouraged federal entities to advance on paths of earlier reform waves, it did not address some of the critical, pending issues pertaining to the decentralization of health services. Notable advancements included the establishment of Secretariats of Health and decentralized bodies for medical arbitration. Yet, critical issues remained pending. Most importantly, the general health law and state health laws called for a decentralization of municipalities in service provision with little progress over the past 30 years. Closely related, the role of jurisdictions - with borders coinciding or spanning those of several municipalities - remained ill-defined. In addition, in half of the federal entities, the financing and management of IMSS-COPLAMAR networks remained outside the SPSS.

43. The interpretation of the study findings must consider some data and methodological limitations. First, study findings are based on data from roughly half of all federal entities that representatives of respective state health systems shared voluntarily. As such, the findings may not be fully representative. At the same time, however, the participation of federal entities that had made very limited reform progress suggested that the study captured the full spectrum of change despite a possible selection bias. Moreover, findings are consistent with previous studies. (CNPSS, 2009) (Secretaría de Salud, 2008) Second, in the absence of data, it turned out to be impossible to gauge implementation progress for some organizational and operational milestones. This required framing change qualitatively, in the case of operational change for example as the introduction of a new way of doing business or, in some instances, dropping milestones completely. Third, in contrast to organizational change, public information was scarce to triangulate responses from state health systems about functional change. Indeed, there may have been some systemic weaknesses. Most doubt remained about the case of Guanajuato, in which responses pointed to hardly any functional changes despite reasonable organizational advances and good system outcomes. Fourth, as progress was in general limited, the original definition of progress levels did not allow for a meaningful classification of state health systems. In lieu of an attempt to define additional levels or sub-levels based on few data points, the study adopted a relative approach, determining average, sub-par and advanced progress.
44. **When compared to the dramatic progress in implementing part one** (World Bank, The impact of the Social Protection System in Health on coverage and financial protection of Mexicans without social security., 2012), **part two of the 2003 reform seemed to have gone missing in action.** In most federal entities, change towards the reform vision remained nascent. Moreover, the often few steps built on an unfinished reform agenda of decentralization that had left state health system with a diverse set of organizational and functional arrangements. The limited, yet diverse progress sheds doubt on the consensus around the reform model. At the same time, more recent research and policy recommendations hint to an approach that focuses on functional solutions rather than institutional forms (World Bank, 2011) and reform ingredients rather than recipes (OECD, 2010). Against this background, diversity, in particular when lessons are harnessed, may not be a challenge but an opportunity. At the same time, however, the status quo in many state health systems seems the result of several unfinished reforms. As such, comprehensive reforms that tie up loose ends from previous reform ends have the potential to boost system performance. This opportunity should appeal in particular to those state health systems that benefitted from the introduction of the SPSS through significant budget increases but continue to lag behind better performing and often richer federal entities.

**Looking forward**

45. **To our knowledge, this is the first study to provide a comprehensive implementation status of what we coined part two of Mexico’s 2003 health reform and more research is necessary to better understand the achievements and reasons that drove, but more importantly hampered progress. Yet, the principle options for the federal government to reinvigorate the reform process are as follows:**

**Collaboration:** Drawing on the organizational arrangements and the experience of the National Commission for the Organizational Restructuring of State Health Systems, the federal government could collaborate with federal entities in the diagnosis of reform achievements and bottlenecks, identification and implementation of reform strategies and the evaluation of results. Taking advantage of the variations in progress across federal entities, efforts could be complemented by establishing platforms to facilitate learning across federal; moreover, by comprehensively capturing and publicizing the performance of state health systems, thus, promoting reputation-building behaviors.

**Regulation:** The federal government could refine the provisions of the general health law, providing more details regarding the functioning of state health systems and the roles of municipalities and jurisdictions.

**Financial incentives:** The federal government could create financial incentives to improve the performance of state health systems to induce change, while remaining agnostic about how this is to be achieved. Alternatively, it could reward states that adopted superior organizational, institutional and operational arrangements.
Among these options, a combination of enhanced efforts to support local reform and regulatory initiatives seems more in line with the sector’s reform tradition. In contrast, setting financial incentives seems by and large unfeasible as legislation governing the fiscal relation between the federation and federal entities locks-in budgets and thus prevents reductions in consecutive years. Moreover, financial performance rewards could reverse current trends and exacerbate fiscal imbalances in favor of wealthier and more developed federal entities.
Annex 1: Critical Pathways

Table 5: Organizational Change

<table>
<thead>
<tr>
<th>Design Feature</th>
<th>Level 1</th>
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Table 6: Stewardship

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Table 7: Financing

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Table 8: Service Provision

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*Abbreviations: see tables 1 and 2*
F. References


Soberon. (1986). *The health care reform in Mexico before the 1985 earthquake.*


Ugalde, N. M. (2009). *25 years of convoluted health reforms in Mexico.*

