Overview of the Mexican health system and of the Mexican Institute of Social Security

The Mexican Institute of Social Security (IMSS) is the largest health service provider in Mexico and covers almost half of the Mexican population. The overview describes the role of IMSS and the services it provides in Mexico's health care system. It also highlights how good governance practice within its public procurement system improves the health of its beneficiaries.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Good governance in Mexico's public procurement increases efficiency and savings

As in many other countries, Mexico's main providers in the health care sector are under intense pressure to deliver more and improved services with limited resources. Procurement is key to the effectiveness and viability of this sector, as it accounts for considerable administrative and financial resources and is an essential element for service delivery. However, due to its complexity, the size of the financial flows it generates and the close interaction between the public and private sectors, public procurement is also the government activity most vulnerable to waste, fraud and corruption. As such, good governance is necessary for enhancing credibility and public trust in the capacity of the health care sector to deliver timely and effective services to the public.

The Mexican federal public administration has made considerable progress in strengthening its public procurement function in recent years. Procurement reforms have included:

- increasing flexibility and providing more tools through the legal framework to support efficiency;
- revamping the Mexican federal e-procurement platform (Compranet); and
- clarifying roles and responsibilities of stakeholders.

This has provided the health care sector with needed tools for improving its procurement outcomes. The remaining challenge resides in implementing these reforms.

Although good governance and practices in procurement alone will not resolve all of the financial constraints facing the Mexican health care sector, it is an essential component for improving value for money and strengthening trust and credibility in order to embark on more structural reforms.

The efficiency of health care public procurement is essential for improving health outcomes

Although health indicators of the Mexican population have improved over the past two decades, life expectancy at birth remains lower and infant mortality higher than in most OECD member countries (OECD, 2011a). The OECD (2010) report, *Health Care Systems: Efficiency and Policy Settings*, provides statistical evidence showing a strong correlation between the level of health spending and health indicators, such as life expectancy. In fact, health spending is the variable that contributes most to health status (Figure 0.1).

In 2009, Mexico had one of the lowest total health expenditure per capita among OECD member countries (USD 918 compared with the OECD average of USD 3 223). Mexico also has one of the lowest health expenditures as a share of gross domestic product with 6.4% versus the OECD average of 9.6% (Figure 0.2). Similarly, Mexico has the lowest expenditure per capita on pharmaceuticals (USD 249) of OECD member countries, although its share of total health spending (27%) is almost twice the OECD average (15%) (OECD, 2011b).

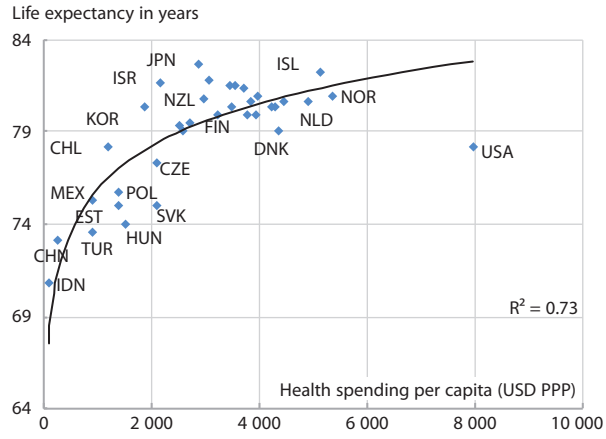
Opportunities to increase health care spending may be limited in Mexico's financially-constrained health care sector. Therefore, the procurement function is a key lever that can be used to improve the quantity and quality of products and services delivered in a timely manner, leading to improved Mexican health indicators.

Figure 0.1. **Contributions of health care spending to changes in health status**

Contributions of main explanatory variables to changes in health status, 1991-2003

	Gains in life expectancy at birth		Decline in infant mortality rate
	Women	Men	Deaths per 1 000 live births
Explained by:	Years		
Health care spending	**1.14**	**1.34**	-2.53
Smoking	0.00	0.12	-0.21
Alcohol	0.06	0.07	-0.24
Diet	0.02	0.02	0.03
Pollution	0.15	0.29	-0.75
Education	0.50	0.49	-0.89
GDP	0.11	0.63	-1.01
Observed changes	2.49	3.45	-4.67

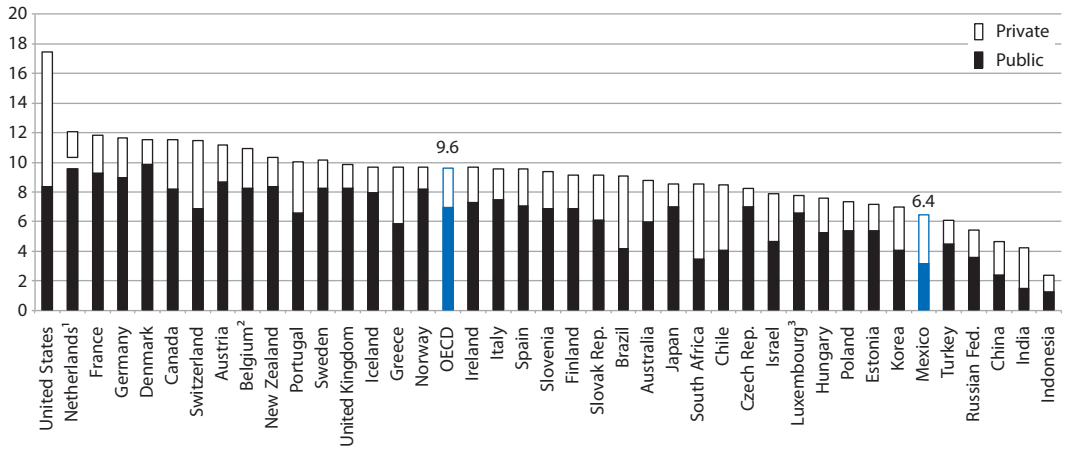
Life expectancy at birth and health spending per capita, 2009 (or latest year available)



Note: Contributions of health status determinants are calculated using panel data regressions on a sample of countries for which data were available.

Source: OECD (2011), *How's Life? Measuring Well-being*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264121164-en*.

Figure 0.2. **Total health expenditure as a share of gross domestic product (2009 or closest year)**



Notes:

1. In the Netherlands, it is not possible to clearly distinguish the public and private share related to investments.
2. Total expenditure excluding investments.
3. Health expenditure is for the insured population rather than the resident population.

Source: OECD (2011), Health at a Glance 2011: OECD Indicators, OECD Publishing, Paris, *http://dx.doi.org/10.1787/health_glance-2011-en*.

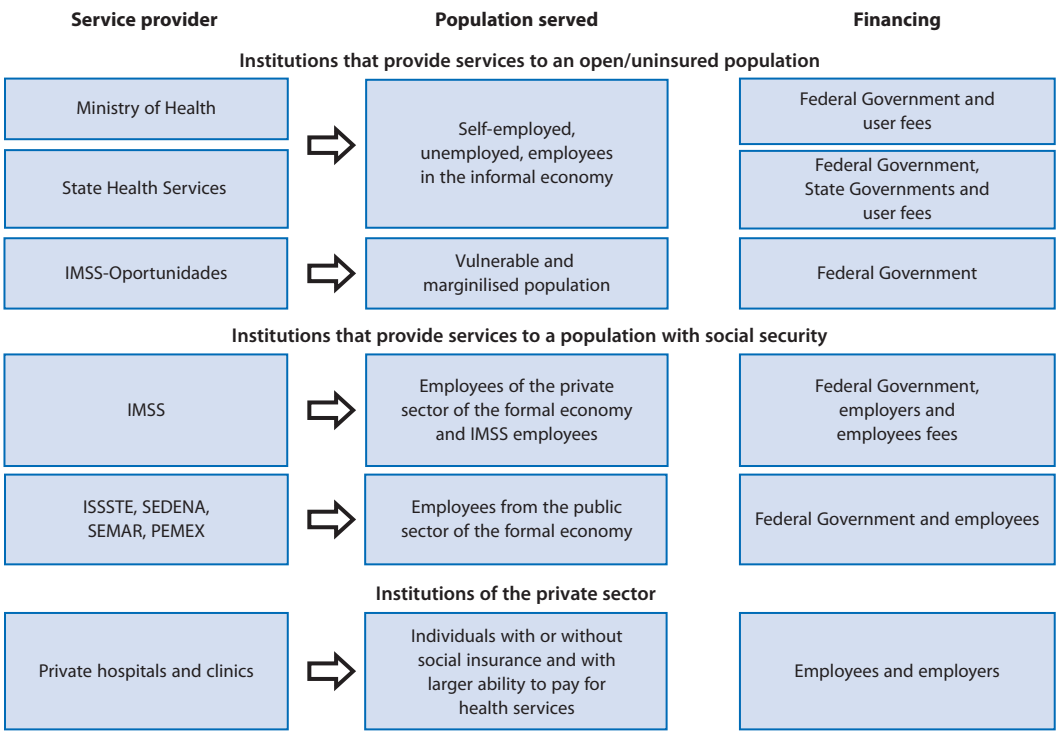
The Mexican Institute of Social Security (Instituto Mexicano del Seguro Social – IMSS) has a predominant position in a fragmented Mexican health care system

Mexico has a fragmented health care system comprised of three main types of service providers (Figure 0.3). These institutions provide specific health services to different segments of the population:

- Social security providers: mandatory for employees in the formal economy.
- Private insurance: voluntary, with individuals paying premiums to a private insurer. Premiums are defined according to the individual's risk profile and for a mutually-agreed package of health services.
- System of Social Protection in Health (*Sistema de Protección Social en Salud Seguro Popular*): reserved for citizens not covered by any other health care scheme. It is almost entirely financed by federal budgetary resources.

Among the different health service providers, IMSS covers almost half of the Mexican population and provides the largest number of health services in Mexico (Table 0.1), making it the largest health and social security provider in Latin America.

Figure 0.3. **Mexican health system**



Notes: 1. ISSSTE: State Workers Institute for Social Security and Services (*Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado*), SEDENA: Ministry of National Defense (*Secretaría de la Defensa Nacional*), SEMAR: Ministry of the Navy (*Secretaría de Marina*), PEMEX: Mexican Petroleum (*Petróleos Mexicanos*).

Source: IMSS (2011), *The Mexican Institute of Social Security: Evolution, Challenges and Perspectives,* IMSS, Mexico.

Table 0.1. **Services provided in the health care sector (%, 2008)**

	Consultations						Auxiliary diagnostic services		
Service provider	General	Speciality	Emergency	Dental	Discharges	Surgeries	Laboratory	Radiology	Other
IMSS	47.8	40.4	69.7	30.5	41.2	44.9	52.4	54.1	64.1
ISSSTE	7.6	16.0	3.8	8.9	7.2	7.7	8.4	8.3	12.7
Ministry of Health	41.3	32.2	18.6	54.5	46.6	42.1	32.9	30.3	19.3
Other	3.3	11.4	8.0	6.1	4.9	5.4	6.3	7.3	3.9

Note: Ministry of Health includes the services offered by state health services, national health institutes, federal reference hospitals and the System of Social Protection in Health.

Source: IMSS (2011), *The Mexican Institute of Social Security: Evolution, Challenges and Perspectives*, IMSS, Mexico.

As a service-proving entity, IMSS has two types of schemes:

- The statutory scheme is funded by contributions from employers, the state and the employees. It has five types of insurances: sickness and maternity; labour risks; disability and life insurance; pension; unemployment at old age; day-care; and social benefits. This category represents 71.4% of the insured population.
- The voluntary scheme is by agreement with IMSS and it may be subject to insurance, employees in family industries and independents such as professionals, small traders, artisans and other self-employed, etc.

IMSS provides a vast range of services of highly diverse nature and complexity

IMSS is an autonomous government institution that provides health and social security services to private sector workers and is governed by representatives from the state, employers and workers. Public sector workers are covered by the State Workers Institute for Social Security and Services (*Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado* – ISSSTE). IMSS was founded on 19 January 1943, and is ruled by the Social Security Law (21 December 1995). It is governed by a General Assembly, a Technical Council, an Oversight Commission and a Director General appointed by the President. The General Assembly is composed of 30 members: 10 representatives from the federal government; 10 representatives from employers' organisations; and 10 representatives from employees' organisations. General Assembly members hold office for six years and may be reappointed. In line with its mandate and structure, IMSS can be represented along three lines of service: collection, insurance and services (Figure 0.4).

Figure 0.4. **IMSS lines of service**

Source: Information provided by IMSS.

With total revenues representing almost 2% of Mexico's gross domestic product, IMSS is the second largest collector of government revenue after the Tax Revenue Administration Service (*Servicio de Administración Tributaria*). Furthermore, it pays eight times more medical premiums than all private insurers combined. It has the largest medical and social security infrastructure in the country, with around 380 000 employees (INEGI, 2011). In 2010, it provided medical and social services through:

- 35 local entities (delegaciones) in charge of first- and second-level medical units;
- 25 High Specialty Medical Units (Unidades Médicas de Alta Especialidad – UMAEs): hospitals equipped with high technology and the maximum therapeutic and diagnostic services;
- 1 510 Family Medicine Units (Unidad de Medicina Familiar);
- 262 general hospitals;
- 1 459 day-care centres;
- 135 discount stores; and
- 74 facilities for recreation and culture (IMSS, 2011).

In a typical day, IMSS provides close to 470 000 medical consultations, cares for approximately 195 000 children in day-care centres and attends 1 225 childbirths (Table 0.2).

IMSS is currently facing difficult financial challenges. The Mexican population is experiencing a demographic and epidemiological transition that implies a large and changing demand for medical services with associated increases in complexity and cost. IMSS is also facing a gap between the available infrastructure and its operating requirements; the number of beds available per 1 000 insured users declined from 1.85 in 1980 to 0.8 in 2010. According to standardised international indicators on health care capacity and infrastructure, IMSS current installed capacity is insufficient for offering the quality and quantity of services required for its approximately 54 million users (Table 0.3).

IMSS public procurement represents 4% of all public sector procurement

In 2010, IMSS total procurement spending represented 4% of Mexico's public procurement and 13% of all IMSS spending. As indicated in Figure 0.5, goods represent the highest share in terms of number and value of IMSS procurement contracts.

The IMSS procurement function must respond to a wide variety of needs, its main purchases being medicine (with a monthly demand of 12 million prescriptions) and medical supplies (Table 0.4). Compared with many other major Mexican public agencies, IMSS procurement activities are shaped by a few unique factors. These are, however, not unique compared with health service providers in other countries. Such factors include: low tolerance for non-conforming delivery; highly variable and unpredictable demand for some items; and a high degree of geographic dispersion of end-users.

The procurement of medical services has recently become more important, and IMSS is not able to cover some of them through its existing capacity (e.g. haemodialysis, domiciliary supply of oxygen, blood banks and laboratories services). To face this challenge, IMSS is working on a strategy which involves exchanging medical services with other public health institutions (such as ISSSTE) in order to reduce its dependence on private suppliers and obtain better prices.

Table 0.2. **Average daily operation: service provision dynamics (January-August 2011)**

Indicators	Average number
IMSS user population	54 004 000
Population assigned to a Family Medicine Unit	38 401 332
Medical services	
Total medical consultations, including:	469 441
Family medicine consultations	*325 828*
Specialty consultations	*76 339*
Dental consultations	*18 468*
Emergency care	*48 805*
Hospital discharges	5 442
Patient days	26 520
Surgical interventions	4 076
Childbirths attended	1 225
Clinical tests	720 442
Radio-diagnostic studies	53 045
Other services	
Pensions paid at the close of the month	2 874 511
Children attending day-care centres	195 457
Average number of daily movements for collection and affiliation services	300 000

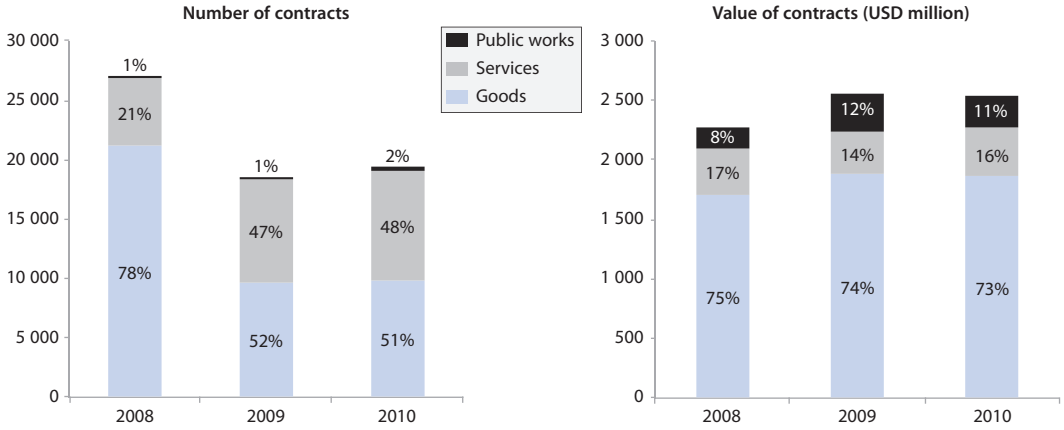
Source: Information provided by IMSS.

Table 0.3. **IMSS infrastructure for the provision of medical and social benefits (2010)**

Medical infrastructure			
Hospital beds	32 182	Pharmacies	728
Operating rooms	1 181	First-level medical units	1 510
Clinical laboratories	539	Second-level medical units	262
Delivery rooms	439	Third-level medical units	25
Blood banks	40	Doctor's offices	15 240
Other infrastructure			
Theatres	74	Discount stores	135
Social benefit centres	143	Vacation centres	4
Funeral centres	15	Day-care centres	1 459

Source: IMSS (2011), *The Mexican Institute of Social Security: Evolution, Challenges and Perspectives,* IMSS, Mexico.

Figure 0.5. **Size and value of IMSS procurement for goods, services and public works (2008-10)**



Source: Data provided by IMSS.

Table 0.4. **Main goods and services procured by IMSS (2010)**

Categories of goods	% of total value of procured goods	Categories of services	% of total value of procured services
Pharmaceutical	52	Community nursery neighbourhood scheme	27
Integrated services	20	Conservation	18
Treatment, laboratory and radiological items	10	Information technology, hardware, software and bands	11
Vaccines	6	Energy and water	10
Orthotics and prosthetics	2	Subrogated medical services	10
Dairy	1	Oxygen	5
Other	8	Security	4
		Fuel for vehicles	4
		Leases	1
		Other	9
Total	100	Total	100

Source: Information provided by IMSS.

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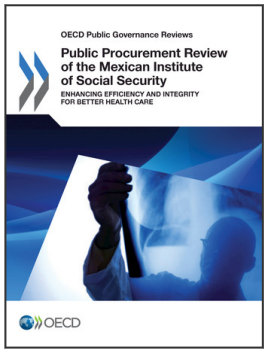

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