Alliance for Health Policy and Systems Research
Flagship Report 2014

Medicines in Health Systems: Advancing access, affordability and appropriate use

Chapter 3 - Annex 4

Page 0

BU Center for Global Health & Development

Medicines in Universal Health Care Coverage

Case Study of Seguro Popular in Mexico

Submitted for Review
March 31 2014

Veronika J. Wirtz
Center for Global Health and Development
Boston University
Boston, Massachusetts, USA

In-Country Reviewer:
Anahi C. Dreser
Center for Health Systems Research
National Institute of Public Health
Cuernavaca, Mexico

Acknowledgement

Supported by the World Health Organization
Purchase Order 200804049

Summary

With the creation of the national health insurance program called *Seguro Popular* (SP) in 2003 the Mexican government initiated scaling up health coverage with the aim to reach universal health coverage (UHC) by 2010 (which was later extended to 2011) (1). Affiliation was targeted towards the population previously not covered by other social insurance. Official government sources declared 100% coverage in 2012 (2).[1]

As an upper-middle income country Mexico spent 6.3% GDP on health in 2010, US$962 per capita, out of which 49% were from public and 51% from private sources (3). As the health system is decentralized the national health policies including those applying to SP are implemented heterogeneously throughout the states. The following describes the main medicines management strategies used to ensure access to and cost-effective use of medicines within SP.

Medicines selection: The medicines within the formulary are chosen based on the 268 interventions (including surgical) that are covered by SP; currently (2012) there are 522 medicines included in the formulary (4). It is annually updated and the number of medicines included has increased over the years since SP's creation (4).

Generic substitution and cost-sharing: Public facilities do not sell medicines and are only allowed procuring those within the public sector formulary (5). Medicines in the formulary are provided without charge at the point of dispensing.

Price negotiations: Negotiation of medicines prices is confined to single-source products and they are conducted annually by a commission at national level which comprises all major public health institutions and insurances including Seguro Popular (6). Purchasing of single-source products are done at state level under the negotiated prices (7).

Bulk procurement: Multi-source products are procured through open tenders by each state (7). In theory states can coordinate themselves to purchase bulk but in practice this is hampered due to different states regulations of medicines procurement and differences in timing with respect to the procurement processes (8). From 2014 onwards, this will change with centralizing much of the procurement process in a wake of a large financial reform to make use of public funds more transparent and holding states more accountable (9). Similarly, a national electronic system (CESMed) has been introduced to support public institutions providing states with information on procurement prices (10).

Provider network: In theory, State Fundholders of SP are free to purchase services from public or private providers. However, in practice most purchase from public (State Ministry

[1] This is in contrast to other information sources such as the National Health and Nutrition Household Survey 2012 published that 75% of the population reporting being beneficiary of a health insurance scheme.

of Health) institutions. Public providers need to be accredited to deliver services to SP beneficiaries; 75% of all units had been accredited in 2012 (1). For dispensing this means that most dispensing of medicines to SP beneficiaries is done at public institutions. Since 2012 some states are piloting a scheme (RASEM) in which private pharmacies are allowed to dispense SP prescriptions free of charge (11). No accreditation of these pharmacies by SP is necessary and pharmacies interested to provide the service for beneficiaries apply to the State Fundholders of SP.

Provider payment: Seguro Popular State Fundholders pay service providers via a global budget and not on a fee-for-service payment. Private pharmacies contracted by SP are paid 20% mark up for service provision in addition to the national established reference prices (see section above) (11). Physicians in the public sector that provide services for SP beneficiaries are paid by fixed salaries and do not receive any payment in related to services provided (no financial incentives nor disincentives). Many physicians working in public health units also have their private consultancy offices (12).

Disease management program: Care in specialized primary care units are available for chronic disease such as diabetes (13). There is no formal mechanism of prescription auditing and feedback to prescribers.[2] Satisfaction is monitored regularly and results published.

The strategies described above at intended to promote affordable and equitable access and cost-effective use of medicines. The following evidence is available in relation to equitable, affordable access and cost-effective use. Whether these aspects are a consequences of the strategies implemented is not clear in some of the cases.

In 2012 18% of *Seguro Popular* beneficiaries did not obtained their prescribed medicines; most of them reported that this was due to stock out (14). National average of receiving all medicines prescribed at the point of care was 64.5%; beneficiaries who did not receive medicines at the point of care had to obtain them outside the public sector incurring in out-of-pocket expenditure (OOP) or forgo purchasing them (15). Large differences were found in the amount that states invest in *Seguro Popular* that might explain some of the state variations in supply and OOP expenditure. Per capita spending was around $40 dollar per beneficiary in Chihuahua and only less than 10 cents in Hidalgo (16).

With respect to the affordability several studies have been done to evaluate whether Seguro Popular had an impact on health related OOP and on medicines related OOP in particular. Two studies done in the early implementation phase of *Seguro Popular* found an impact on catastrophic expenditure but not on OOP related to medicines (17; 18). A study

[2]Pharmacists are usually not involved in dispensing. There are increasing their participation in hospitals, but still not widespread at primary care for Seguro Popular beneficiaries.

using 2008 household data on income and expenditure found that there was no difference in the amount of OOP on medicines between household beneficiaries of Seguro Seguro Popular and those without Seguro Popular but similar household demographics (19).

Eploring potential consequences of reference price implementation.

This section examines the following question with respect to Seguro Popular procurement policies: What were the potential consequences of introducing procurement reference prices for Seguro Popular State fundholders for different stakeholders in the health system?

In 2009 the National Commission of Social Protection in Health, in charge of oversight of Seguro Popular State Fundholders, introduced procurement references prices for medicines to ensure that State Fundholders would not procure at prices more than 20% above those reference prices (20). At the time the reference prices were set in accordance with procurement prices achieved by the largest public health provider in Mexico, the Mexican Social Security Institute (IMSS).

As a consequence administrative staff involved in medicines procurement for Seguro Popular State Fundholders reported that distributors and wholesalers were less inclined to participate in tenders arguing that procurement prices were set too low for distributors and wholesalers to be profitable (21). As a result, administrative staff at State level complained that tenders were not successful and the number of direct procurements increased pushing up procurement prices and resulting in increasing budget constrains (21).

The National Commission of Social Protection in Health had previously put a cap on medicine spending: only up to 30% of total budget could be spent on pharmaceuticals (20) which meant that States facing increasing procurement prices would need to reduce in procurement volume to stay within the budget. It is likely that states spending more on direct procurements faced difficulties to purchase sufficient medicines to respond to the demand.

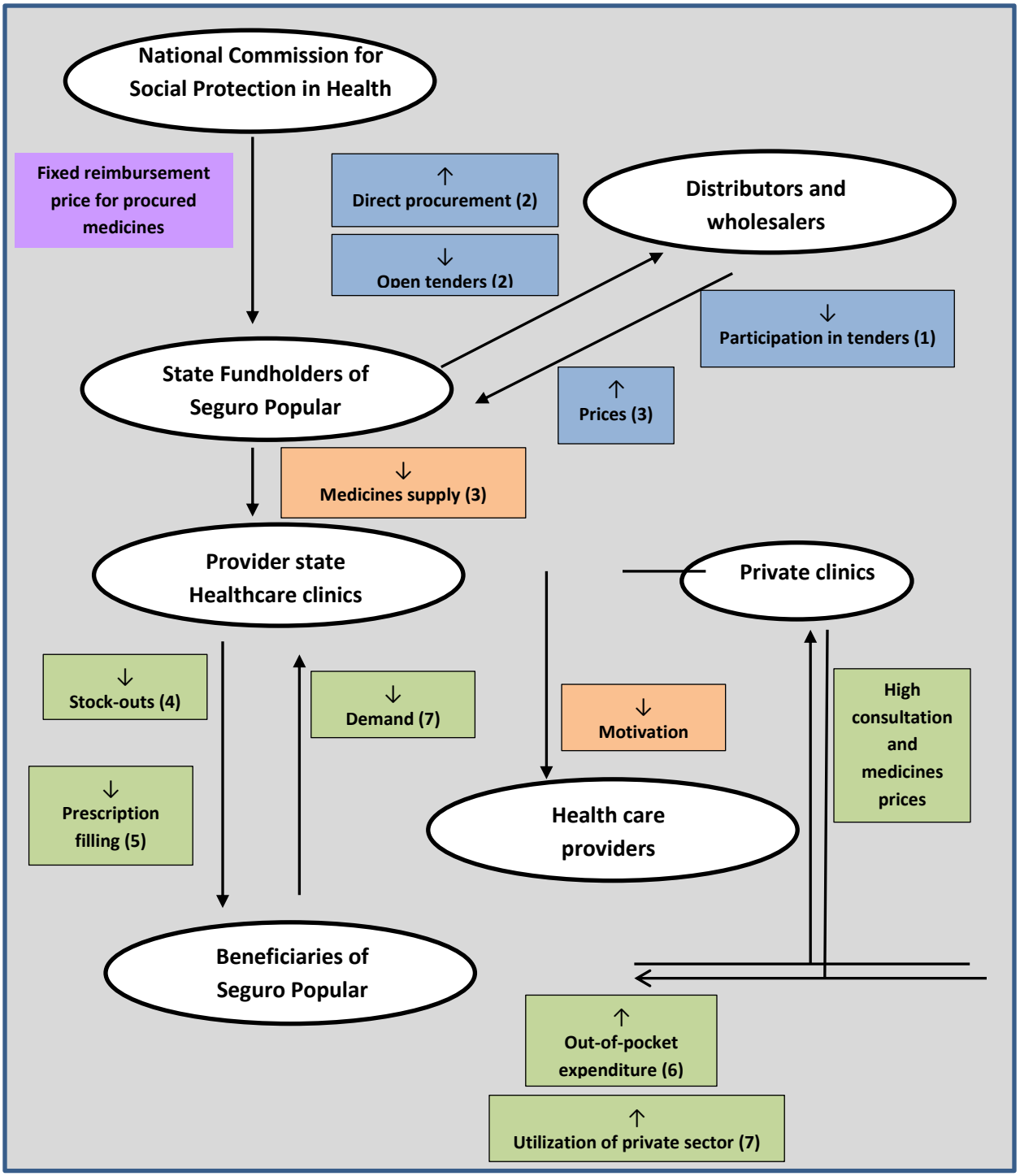
Evidence for insufficient supply to respond to demand were reported stock-outs (22) and the extent to which prescriptions were not filled at the point of care (19). Beneficiaries had to purchase medicines in the private sector incurring in out-of-pocket expenditure (23). There is also evidence that individuals were increasingly using the private sector where they had to pay not only for the medicines but also for the consultation (23). The out-of-pocket expenditure of private sector users has been found much higher than beneficiaries using state health services (23).

The following table and diagram summarize the described consequences.

Table 1: Potential consequences of reference price implementation for State Fundholders

No.	Potential consequence	Reference	Stakeholder(s) affected	Health system building block
1	**Less participation of distributors in open tenders arguing reference prices are too low to be profitable**	Nigenda et al, 2009	State fundholders Distributors	Financing
2	**Increase of emergency procurements as open tenders are unsuccessful**	Nigenda et al, 2009	State fundholders Distributors	Financing
3	**Higher per unit prices and total expenditure per procurement**	Nigenda et al, 2009		Financing
4	**Amount of purchased medicines does not meet demand resulting into stock-outs**	DGE-SSA 2011	Health care units	Health service delivery
5	**A significant number of prescriptions cannot be filled**	Wirtz et al, 2012	Health care units and patients	Health service delivery
6	**Increase in SP beneficiaries who have to purchase medicines in the private sector incurring in out-of-pocket expenditure**	Wirtz et al, 2012	Patients Private sector pharmacies	Health service delivery
7	**A significant proportion of beneficiaries demand care from private instead of public institutions incurring in out-of-pocket expenditure**	Perez Cuevas et al, 2012	Human resources, Health care units	Health service delivery

Figure 1: Potential consequences of reimbursement price implementation in Seguro Popular



References

1. Knaul FM, González-Pier E, Gómez-Dantés O, García-Junco D, Arreola-Ornelas H, Barraza-Lloréns M, Sandoval R, Caballero F, Hernández-Avila M, Juan M, Kershenobich D, Nigenda G, Ruelas E, Sepúlveda J, Tapia R, Soberón G, Chertorivski S, Frenk J. The quest for universal health coverage: achieving social protection for all in Mexico. *Lancet* 2012 Oct 6;380(9849):1259-79.
2. Seguro Popular (2012). *Mexico, one of the few countries that achieved universal health coverage.* Mexico, D.F.: Comision Nacional de Proteccion Social en Salud. http://www.seguro-popular.salud.gob.mx/index.php?option=com_content&view=article&id=561:mexicounodelospaises&catid=75:boletines&Itemid=383
3. World Health Organization. World Health Statistics. Geneva: WHO, 2013. World Bank. *Data.* http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD (accessed August 19 2013).
4. National Commission of Social Protection in Health (NCSPH) (ref a). *Catálogo Universal de Servicios de Salud 2012*. *Mexico*. D.F.: NCSPH.
5. Ley de Adquisiciones, Arrendamientos y Servicios del Sector Público, 2012. http://www.diputados.gob.mx/LeyesBiblio/pdf/14.pdf [accessed 16 Sep 2013]
6. Diario Oficial de la Federación. *Acuerdo por el que se crea la Comisión Coordinadora para la Negociación de Precios de Medicamentos y otros Insumos para la Salud*. Mexico City: *Diario Oficial de la Federación.* 2008 26 Feb; Sect. 1. In Spanish. Available from: cdivirtual.salud.gob.mx/.../diario.../a260208.pdf [accessed 19 August 2013].
7. Diario Oficial de la Federación. *ACUERDO que establece los Lineamientos para la adquisición de medicamentos asociados al Catálogo Universal de Servicios de Salud y al Fondo de Protección contra Gastos Catastróficos, por las entidades federativas con recursos transferidos por concepto de cuota social y de la aportación solidaria federal del Sistema de Protección Social en Salud.* Mexico, D.F.: http://www.dof.gob.mx/nota_detalle.php?codigo=5281003&fecha=30/11/2012 [accessed August 19 2013]
8. Instituto Nacional de Salud Pública. Evaluación y Estrategias de Portabilidad y Convergencia hacia la integración del Sistema Nacional de Salud. Informe final de resultados de los componentes de Convergencia. Cuernavaca, Mor.: INSP, 2011. Available at: http://www.dged.salud.gob.mx/contenidos/dged/descargas/portabilidad_2011.pdf
9. Secretaria de Gobernación. *Propuesta de Reforma Hacendaria* (PRH). Sep 8 2013. http://reformahacendaria.gob.mx/ [accessed Sep 30 2013]
10. Dirección General de Planeación y Desarrollo en Salud (DGLADES). Centro Sectorial de Gestión Web de Informacion sobre Medicamentos. http://www.dgplades.salud.gob.mx/descargas/dpl/CES_Med_FAQ2013v0.pdf
11. National Commission of Social Protection in Health (NCSPH) (ref b). *Comunicado de la Comisión Nacional de Protección Social en Salud, Seguro Popular, a proveedores y distribuidores de medicamentos.* Mexico, D.F.: NCSPH. http://portal.salud.gob.mx/sites/salud/descargas/pdf/conv/convocatoria_feb2012.pdf [accessed August 19 2013]
12. Zurita B, Ramírez T. Desempeño del sector privado de la salud en México. In: Knaul FM, Nigenda G. *Caleidoscopio de Salud*. Mexico D.F.: Funsalud, 2003. Availibility: http://www.funsalud.org.mx/casesalud/caleidoscopio/librocaleido.htm
13. Direccion General de Evaluacion, Secretaria de Salud Federal/National Institute of Public Health. *Evaluación de las Unidades de Especialidades Médicas de Enfermedades Crónicas (UNEMES-EC).* Cuernavaca, Morelos, Mexico: INSP, 2012.

14. Instituto Nacional de Salud Publica. Factsheet. [Prescription filling and expenditure on medicines.] Cuernavaca: INSP, 2012b. [accessed Sep 20 2013]
15. Lazcano Ponce E, Nigenda G, González-Robledo LM, González-Robledo MC, Serván E, Ruiz JA, Bejarano Arias RM, Aguilar Martínez E. *Evaluacion Externa del Sistema de Proteccion Social en Salud 2012. Cuernavaca*, Morelos, Mexico: National Institute of Public Health, 2012.
16. Flores RJM y Murayama RC. Investigación documental a partir de la información publicada por las entidades federativas sobre la situación que guardan los precios de adquisiciones de los medicamentos asociados al catálogo universal de servicios de salud (CAUSES) e identificación de las variables que permitan explicar el comportamiento de dichos precios en las entidades federativas. Seguro Popular 2010. Disponible en: http://www.seguro-popular.gob.mx/images/contenidos/estudios_seguro_popular/gestion_servs_salud_2010/invstgn_medicamentos_causes.pdf
17. Gakidou E, Lozano R, González-Pier E, Abbott-Klafter J, Barofsky JT, Bryson-Cahn C, Feehan DM, Lee DK, Hernández-Llamas H, Murray CJ. Assessing the effect of the 2001-06 Mexican health reform: an interim report card**.** *Lancet* 2006 Nov 25;368(9550):1920-35.
18. King G, Gakidou E, Imai K, Lakin J, Moore RT, Nall C, Ravishankar N, Vargas M, Téllez-Rojo MM, Avila JE, Avila MH, Llamas HH. Public policy for the poor? A randomised assessment of the Mexican universal health insurance programme. *Lancet* 2009 Apr 25;373(9673):1447-54
19. Wirtz V, Serván Mori E, Dreser A, Heredia Pi I, Ávila Burgos L. *Surtimiento y gasto en el acceso a medicamentos en instituciones públicas: asignaturas pendientes*. Cuernavaca, Mor.: INSP/SSA, 2012.
20. Diario Oficial de la Federación. ACUERDO que establece los Lineamientos para la adquisición de medicamentos asociados al Catálogo Universal de Servicios de Salud por las entidades federativas con recursos del Sistema de Protección Social en Salud. México D.F.: Diario Oficial de la Federación, 26 de enero 2009.
21. Nigenda G, Gonzalez-Robledo LM, Juárez C, Sosa S, Idrovo AJ, Wirtz VJ, Aracena B, Ruiz JA, Aguilar E. *Evaluación de procesos administrativos del Sistema de Protección Social en Salud 2009.* Cuernavaca: Instituto Nacional de Salud Publica/Secretaria de Salud, 2010.
22. Direccion General de Evaluacion de Desempeno, Secretaria de Salud Federal (DGED-SSA). Observatorio del desempeño ambulatorio. Chapter VII: Propuestas de fortalecimiento del ciclo de suministro de medicamentos en las UAA de los SESA. In: Primera edition. Mexico, DF: SSA 2011.
23. Perez-Cuevas R, Doubova SV, Wirtz VJ, Dreser A, Serván Mori EE, *Hernández Ávila M. Consultorios médicos en farmacias privadas: efectos inesperados en el uso de servicios de salud y el acceso a medicamentos*. Cuernavaca, Mor.: INSP/SSA, 2012.

Table 2: Overview of the medicines benefit package and pharmaceutical management strategies used in *Seguro Popular (SP)*

Domain	**Area**	**Policy in place**	**Description of the policies at national level**	**State level variation**	**References**
Selection					
	Formularies	Yes	Formulary includes around 500 medicines; updated every year at national level. Modifications of the formulary are made at state level. Purchases outside formulary can be commissioned.	Yes	
	Cost-sharing	Not applicable	No cost-sharing as medicines are free at the point of care; dispensing of medicines most commonly within state facilities and little private sector involvement.	N/A	
	Generic substitution	Not applicable	No generic substitution as medicines are purchased and dispensed with government facilities.	N/A	
Purchasing					
	Negotiation	Only for single source products	Price negotiation only for single sourced products at national level. Tenders of multi-source products at state level using generic reference prices fixed at national level.	No	
	Bulk purchasing	Yes	States purchase multi-source products and free to coordinate purchases. In practice, coordination of bulk purchases is difficult due to different state legislation.	Yes	
	Generic reference pricing	Yes	At national level generic reference prices are fixed.	No	
Contracting and payment					
	Provider-	Fixed salary	Physicians, nurses, clinical managers,	No*	

	payment methods		administrative staff receive a fixed salary independent of productivity or capitation. Payment of distributors may vary according to contracts.	
	Rate of reimbursement	Not applicable	Prepayment of medicines by the state. Enduser does not need to pay fees at the point of care. Only applicable to private contractors that operate in some states.	No
	Preferred provider network	Yes	State agencies in charge of purchasing care are free to contract public or private providers as long as they are accredited. Currently 75% of public health care units are accredited. In practice, most states have purchased care from public providers (Ministry of Health).	Yes
Utilization				
	Pay for performance	None	Fixed salaries with no mechanism to reward performance. Payment of personnel lower than in private sector which incentivize to work outsite the public sector (moon shine services). Disbursement of funds from national to state level is conditions to reporting requirements. Transfer of finances between federal level and states are not tightly linked with performance.	No
	Separation of prescribing and dispensing	Yes	Physicians' payment is not linked to their prescribing. There is no financial incentive related to prescribing as dispensed medicines are purchased by the state and provided free of charge at the point of care.	No
	Disease management programs and education	Yes	Specific programs exists for several conditions (e.g. diabetes, HIV/AIDS), some of them are delivered by specialists. Little supervision and mechanisms to ensure quality of care. Large	Yes

			variation within and between services.	
	Patient/consumer satisfaction	Yes	Measuring of consumer satisfaction is part of the indicators used to report on quality of care in state facilities. High satisfaction is reported with little variation within institutions over time.	No
Information systems				
	National information providing information about prices for medicines procurement	Yes	Procurement information available. In addition to the national information system each state has their own information system.	Yes
	No national information on monitoring medicines consumption or quality of care related to prescribing	No	Ad-hoc evaluations, lack of information that supports decision-making about promoting cost-effective utilization or that feeds information to providers.	Yes