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CASE STUDIES

5.1 Mother & Child Universal Insurance (SUMI) - BOLIVIA-

1). CHARACTERIZATION OF THE SPHS

Bolivia's health system, established in 1979, consists of a public health sector, a social security system, and the private sector. In 1996, the Ministry of Health and Social Welfare launched the "To Live Better" Health Plan, designed to strengthen the Bolivian health system and ensure universal access to individual, family, and community primary health care. Three successive SPHS aimed at the mother and child population have been implemented under the aegis of the Health Plan. They are the National Maternal and Childhood Insurance (SNMN), the Basic Health Insurance (SBS), and the Mother and Child Universal Insurance (SUMI). Despite their names, they are not insurance schemes, but rather slightly differing forms of free maternal and child care.

The SNMN was created in 1996 with the goal of reducing the number of maternal deaths by 50% and halving the deaths of children under five from pneumonia or diarrhea. The program's creation was based on the belief that reducing economic barriers to health would improve access and increase utilization of health services. To this end, it focused on providing services, free of charge, to children under five, as well as to pregnant women. The SNMN was financed with municipal funds and resources from the National Treasury (Tesoro General de la Nación- TGN) and from international cooperation. It originally covered 26 services,

later expanded to 32 services, to be provided in public health facilities, as well as those of the Social Security, and in the facilities of churches and NGOs that had signed agreements with local municipalities. The package included prenatal care; labor and delivery; postpartum care; Caesarian-section; pre-eclampsia; eclampsia, and other obstetrical emergencies; newborn care; neonatal asphyxia; pneumonia; sepsis, and diarrhea, among others (UDAPE/UNICEF, 2006).

In 1998, the SNMN was replaced by the SBS, which increased the number of health interventions provided to 92, covering complications of the newborn, sexually transmitted diseases, post-abortion care, and some services directed at the general population and financed by national programs (malaria, tuberculosis and cholera). Besides health interventions, the SBS included selected laboratory tests, transfer of patients referred as a result of obstetric emergencies, and health personnel visits to rural communities without health facilities. The SBS not only expanded the package of services; it also extended participation to all women of reproductive age, as well as including Social Security and non-profit providers in its provision.

Although the SUMI, created in 2003, retained the goal of reducing maternal and child mortality by increasing health services utilization through the elimination of economic barriers, it also introduced substantial changes in the system. It included higher complexity care for mothers and children in the provided benefits, thus distinguishing itself from previous programs which primarily focused on basic care. In order to provide such high-level care, the program extended its benefits package to all institutionalized health services and made it available to women, through pregnancy and up to six months after childbirth, and to children under 5 years old. This group received care in all three sub-systems: the public system, Social Security, and certain private establishments assigned as providers, all of them organized into municipal health networks. But the SUMI also restricted coverage, removing the general population and reproductive age women.¹⁴

14. The government has recently sought to extend coverage under the free insurance, first to all Bolivians over 60 (Seguro de Vejez) secondly to Bolivians under 21, and finally to all citizens (Seguro Universal de Salud). But legislative ratification of the universal insurance, and the implementation of the old-age insurance, has been blocked by disagreements between central and municipal governments over funding for the programs.

Table 18: The evolution of the mother and child universal insurance in Bolivia

	SNMN	SBS	SUMI
Target population	Pregnant women and children under 5 years	Pregnant women, children under 5 years and general population for specific interventions	Pregnant women until 6 months after childbirth and children under 5 years
Package (risks covered)	32 interventions corresponding to the first and second levels of care	92 interventions corresponding to the first and second levels of care	Comprehensive, with few exceptions. Includes complex care and dental care
Financing	2.7% of central tax transfers to municipalities (3.2% of 85% of "co-participation" funds)	5.4% of central tax transfers to municipalities (6.4% of 85% of "co-participation" funds)	10% of central tax transfers plus 10% of the National Dialogue Account ¹ for the National Redistribution Fund (Fondo Solidario Nacional, or FSN)
Distribution of funds	Per capita distribution to municipalities	Per capita distribution to municipalities	Per capita distribution of central tax transfers plus demand-based access to FSN to cover deficits
Payment Mechanism	Fee-for-service reimbursement; Fees set centrally	Fee-for-service reimbursement; Fees set centrally	Fee-for-service reimbursement; Fees set centrally
Management	Municipality reimburses health facilities	Municipality pays health district, which consolidates information from facilities	Municipality pays Management of health network after approval by Local Health Directories
Reimbursement fees	Based on variable costs (drugs and other inputs) + incentives for deliveries and other priority services	Based on variable costs (drugs and other inputs) + incentives for deliveries and other priority services	Based on variable costs and estimated frequency of cases; differentiated by level of complexity of facilities
Use of excess funds	Forbidden; specific one-time exceptions were granted	Forbidden; specific one-time exceptions were granted	Regular use granted for health investments

1. The National Dialogue Account was established in Bolivia as a frame of the HIPC initiative aimed at alleviating the burden of the external debt.

SOURCE: The World Bank, 2003

The SUMI also seeks:

- i) to strengthen the processes of decentralization and the participation of civic organizations in health management through the implementation of Local Health Directories (DILOS) and social networks
- ii) to strengthen municipal participation in the financing of drugs, supplies, and laboratory tests as well as the Municipal government's responsibility for paying participating health providers for drugs, supplies, and hospitalizations,

iii) to provide incentives to providers through a mechanism based on fee-for-service payments.

The SUMI not only doubled the resources earmarked at the municipal level (to 10% of the central tax transfers distributed to the municipalities on a per capita basis), but also created a National Redistribution Fund, financed with 10% of the Special National Dialogue Account. These additional funds are not distributed to municipalities on a per capita basis but are available for municipalities whose own resources are insufficient to cover needs. Therefore, the financial resources for the program derive from three sources:

- National Treasury (TGN): finances the human resources of the public health subsystem, while Social Security or other facilities enlisted in the SPHS cover human resources with their own funds.
- Taxes: a percentage of co-participation funds (7% in 2003, 8% in 2004, and 10% in 2005) from each municipality is used for benefit payments.
- National Redistribution Fund

The estimated beneficiary population by 2004 was 1,600,000 - around 74% of the target population. 1,279,000 children under 5 years of age and 328,000 women (either pregnant or within 6 months of pregnancy) were covered.

Table 19.: SUMI's main features

Feature	Category
Type	Free maternal and child health care
Mode of financing	Publicly funded
Source of funds	General taxes Other revenues: extra budgetary source (HIPC II)
Risk pooling arrangement	Income-based
Management and management level	National/Sub-national/Local MoH Local government
Degree of selectivity	Targeted: Pregnant women until 6 month after childbirth and children under five years old
Who is entitled to coverage	Individual
Condition for access	Specific attribute: age/proof of childbirth/proof of pregnancy
Extent of risk pooling	Small pool
Explicit portfolio?	Not explicit
Degree of coverage	Complementary
Provision	Mainly public

2). CHARACTERIZATION OF THE GENERAL SETTING IN WHICH THE SPHS IS IMPLEMENTED

Basic Information - Bolivia is a low income country located in the Andean Region of South America. It has a population of approximately 9.1 million, with 37% living in rural areas, (as of 2002). More than 80% of the population is under 50 years of age, 13% is under five years old and 48% is of childbearing age (15-49 years old) (UDAPE-PAHO/WHO, 2004). Bolivia is a republic, with an elected president and bicameral legislature. Evo Morales, the current president and Bolivia's first chief of state from an indigenous background, took office in January 2006. He has made social protection in health a priority, pushing to expand the SUMI into a Universal Health insurance.

Ethnicity - Bolivia is a multiethnic country, with 36 different indigenous groups making up 52.3% of the total population. The main indigenous groups are the Aymara (30%) and the Quechua (30%), and many members of these groups do not speak Spanish fluently. The indigenous population suffers from political and social exclusion, and the poverty rate among the indigenous population (78%) is much higher than among those of European descent (less than 50%) (UDAPE-PAHO/WHO, 2004). According to 2002 figures, 91.25% of the indigenous population is covered neither by Social Security nor by a private health insurance (UDAPE-PAHO/WHO, 2004). Deep conflicts over the distribution of power, land, and wealth between the descendants of Europeans and the indigenous population prevail in Bolivian society, posing a threat to the country's governance and hampering social cohesion (UDAPE-PAHO/WHO, 2004; Pavez Wellmann, 2005).

Economic Situation - The majority of the population (64.6%) lives in poverty, making Bolivia one of the poorest countries in Latin America. This situation is especially severe in rural areas and among indigenous groups. Poverty is accompanied by high levels of income disparity, with the average income of the richest percentile 15 times higher than that of the poorest 10% of the population. Unemployment and informality are high, with 50% of the population unemployed and 64.1% of workers belonging to the informal sector. Women usually suffer worse working conditions and have lower salaries and lower educational levels than men. In 1999, 16.4% of the population was illiterate (UDAPE-PAHO/WHO, 2004), and in 1997 the National Survey of Employment showed that illiteracy rates were nearly three times as high among women over 15 as among men of the same age (PAHO/WHO, 2002).

Health - Life expectancy at birth in 2003 was 65 years old; the total fertility rate remains high compared to other countries in the region, but decreased from 4.8 in 1993 to 3.8 in 2003. The incidence of exclusion

from health care among the general population is 77%, with poverty and women's illiteracy its main causes (PAHO/WHO-UDAPE, 2004). According to the World Bank, the barriers to access that result from cultural diversity remain some of "the greatest challenges to improved health among the poor in Bolivia" (World Bank, 2004).

Bolivia's health services network consists of 40 general hospitals, 30 specialized hospitals, 149 basic hospitals, 986 health centers, and 1,408 health posts. Of these facilities, 1,995 belong to the public sector, 197 to Social Security, 254 to NGOs, 101 to the Church, and 66 to the private sector. Households remain an important source of financing for the health sector, contributing to 30% of total health expenditure. Between 1999 and 2001, health care costs consumed more than 10% of monthly expenditure in about 10% of households, and more than 50% of monthly expenditure in 1.2% of households. Seventy-five percent of household health expenditures are on the purchase of pharmaceuticals in drug-stores, representing 20% of national health expenditures (MECOVI survey, 2000).

Table 20: Bolivia's general situation

Contextual factor	Health status		Demand for health care	
	Deteriorates	Improves	Hinders	Promotes
Poverty Rate	X		X	
Education level	X		X	
No. of Rural dwelling/remote settlements	X		X	
Access to water/sanitation/electricity	X			
Government's institutional strength/fragility			X	
Country's governance			X	
Unemployment Rate	X		X	
Labor informality	X		X	

3). ANALYSIS OF THE PERFORMANCE OF THE SPHS

NOTE: The core goals of the three SPHS, as well as their strategies for implementation, were very similar. Therefore, because they succeeded each other without interruption, and also because little data for the post-2003 period exists, the analysis will deal with the combined impact of all three, using the blanket term SUMI for the sake of convenience.

a). Has it increased equity in the access to/utilization of health services?

Utilization of the formal maternal and child health care services covered by the program increased with the implementation of the SUMI. Between 1994 and 2003, the percentage of mothers who utilized health services through the mother and child insurance grew from 3.6% to 53.4%, with by far the highest rate of growth taking place in the lowest income quintile (UDAPE/UNICEF, 2006). Moreover, between 1994 and 2003 this quintile, which contains the largest number of those excluded from health, showed the greatest increase in the utilization of skilled birth assistance, from 5.3% to 21.1% (UDAPE/UNICEF, 2006). The drop in mortality rates during the period (discussed below in section 'e') may be related to this increase in coverage.

However, two concerns remain: (i) in recent years, the rate of increase in coverage has been tapering off; and (ii) the equity gap between the urban and rural, the indigenous and non-indigenous, and the rich and the poor remains high. According to data from the Ministry of Health, in the year 2003 the coverage of institutional deliveries was 55% in the richest Municipal districts, as compared with 41% in the poorest ones. The MECOVI survey found that in 2001 20% of the poorest quintile had access to skilled birth attendance, compared to 89% of the richest quintile. Other studies found that, controlling for income and other characteristics, the probability of having institutional attendance at childbirth is 29% higher if the family lives in an urban area rather than in a rural area, and 17% lower if the head of household is indigenous (World Bank, 2003).

b). Has it offset social determinants that damage health and/or hinder the demand for health care?

Several social determinants act as hindering factors in Bolivia. The most important are poverty, discrimination related to ethnic background, and women's low status in society. The SUMI has helped offset high rates of poverty and unemployment/informal labor, increasing the demand for health care among people in the lowest income quintiles by eliminating the economic barrier. It seems to have not yet reached rural areas and isolated communities, nor has it significantly encouraged women to demand health services. UDAPE found that the most frequent users of public health services were urban mothers with a relatively high income and educational level. But use of public services among mothers with no education increased nearly 300% between 1994 and 2003, while rising only 2% among mothers with a post-secondary education (UDAPE/UNICEF, 2006). To date the SUMI has not issued mechanisms to enforce the right to health. Moreover, discrimination by indigenous origin continues to be

an issue in the provision of health care (PAHO/WHO-UDAPE, 2004). The failure of the SUMI to adequately cover the indigenous majority will likely place severe limitations on its overall effectiveness.

Table 21: SUMI's performance: social determinants

Category	Performance	
	yes	no
Offsets poverty by eliminating or reducing economic barrier	X	
Fosters women's social status		X
Fosters health rights through Right Charts, explicit guarantees, etc.		X
Offsets unemployment/informal labor by eliminating or reducing economic barrier	X	
Offsets women's lack of education, fostering the demand for health care	X	

c). Has it increased access to and coverage of technically appropriate health interventions by eliminating one or more sources of exclusion from health care?

Results to date suggest that the SUMI has been successful in removing the economic barrier to access health services, as evidenced by the observed increase in coverage of priority services for people in the lower income quintiles. However it has not so far addressed other barriers to access that are important causes of exclusion in health in the country, such as cultural or geographic barriers.

According to the ENDSA (Encuesta Nacional de Demografía y Salud) survey, the nation-wide use of skilled birth assistance (doctor, nurse) has increased remarkably, from 27% in 1995 to 55.3% in 2003.¹⁵ The highest rate of increase was observed between 1998 and 2000, the period during which the SBS was first implemented. Utilization of services also rose in the treatment of pneumonia in children under five. According to USAID's Partners for Health Reform *plus* (PHR_{plus}), at least part of this increase can be attributed to SUMI because it exceeds the rate of increase in the utilization of non-covered services and services delivered by non-participating providers. In the case of the 4th prenatal control, the national average increased from 26% coverage in 1996 to 40% in 2004 (UDAPE/UNICEF, 2006).

15. Other sources such as the demographic and health surveys estimate that the use of skilled birth assistance (doctor, nurse) increased from 43.2 % in 1994 to 59.3% in 1998. UDAPE gives the figures of 29% in 1989 and 53.4% in 2003, with the greatest increase occurring between 1998 and 2003 (UDAPE/UNICEF, 2006).

Available data suggest that public health spending allocated to the SUMI is progressive because it has mainly benefited those in the lowest income quintiles. It is noteworthy that the financial resources allocated to the scheme have steadily increased over the years (for example, central tax transfers to municipalities to deliver the scheme went from 2.7% in 1996 to 10% in 2003), although total public expenditure on health decreased by 3.1% from 1998-2002. The country's increase in total expenditure on health, from 5% of GDP (Gross Demographic Product) in 2001 to 7% in 2002, was due to an increase in out-of-pocket expenditure, which grew by 7.1% during that time period.

The SUMI has had little impact on the supply of health services, which are unequally distributed in the country. Misallocation of services produces important access problems, due to long distances between health facilities and households and low installed capacity in rural areas. Although analysis of the SBS' outcomes (SBS, 1998-2002) shows that it improved health financing, reinforced national health priorities, promoted demand for primary health services, and empowered users, low coverage is still a problem in the public sub-sector, with 30% of the population not covered (PAHO/WHO, 2001(c)). Many problems currently persist in access to care due to the low quality of care, especially the technical aspects of the treatment of obstetric emergencies and the lack of cultural adequacy in the provision of health services. The increased demand for care may have put even more stress on already strained human and technological resources.

The SUMI, by establishing explicit relationships and coordination mechanisms between different territorial and managerial levels within the public subsystem, has helped to overcome fragmentation in the area of maternal and child interventions. It has not helped to reduce segmentation, since its goal is not the equalization of quality, content, and delivery conditions of the health services offered to different socioeconomic groups.

Table 22: SUMI's performance: Coverage and access

Category	SPHS	
	yes	no
Increases coverage (rise in number of people covered as a % of eligible population)	X	
Establishes a single guaranteed portfolio of entitlements with the same quality, content, and delivery conditions for all socioeconomic groups so as to avoid segmentation		X
Increases coordination/integration within the system so as to avoid fragmentation	X	
Improves resource allocation and organization of health interventions by increasing the number and capabilities of human resources in previously underserved areas		X
Improves resource allocation and organization of health interventions by increasing the amount of public spending allocated to the scheme	X	
Public spending allocated to the scheme is progressive	X	
Improves geographical distribution of the service delivery network and health infrastructure by increasing the number/amount of health facilities, equipment, medical devices, and drugs in previously underserved areas		X
Increases information system's coverage	X	
Increases access (rise in number of people who access goods/services provided)	X	
Eliminates/reduces geographic barrier		X
Eliminates/reduces economic barrier	X	
Eliminates/reduces gender barrier		X
Eliminates/reduces employment status barrier	X	
Improves access to drinkable water, sewerage, roads, and/or transportation		X
Improves refuse collection		X

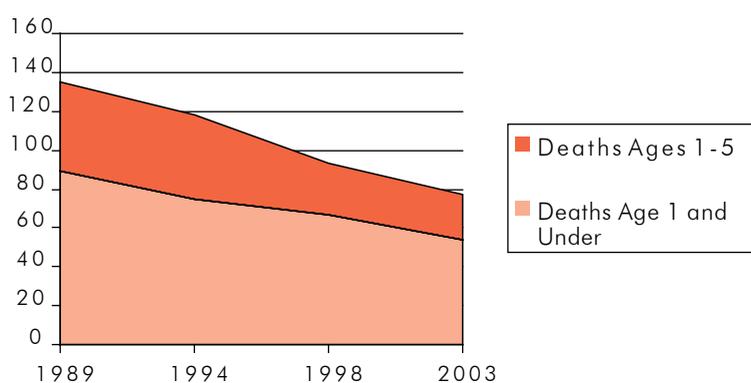
d). Have health outcomes improved?

Maternal Mortality Ratio, Infant Mortality Rate, and Neonatal Mortality Rate decreased over the period from 1998 to 2003. Infant mortality dropped from 75 to 54 per thousand, child mortality decreased from 43 to 23 per thousand, and maternal mortality fell from 390 to 229 per 100,000 births (UDAPE/UNICEF, 2006). But these gains were not always equally distributed. While the impact of the scheme on the risk of infant mortality in urban areas was significant, it was nearly nil in rural areas, with the reverse being true for the risk of under five mortality (UDAPE/UNICEF, 2006). These mixed results - significant impact on the risk of infant death in urban areas and under five death in rural areas - make it difficult to draw a causal connection between the implementation of the schemes and reduced infant mortality. But it can be argued that the

overall downward trend in maternal and neonatal mortality is linked to the increased frequency of institutional delivery among the lowest income quintiles - which characteristically exhibit the highest neonatal and maternal mortality. This rise in the coverage of institutional births is due to the lowering of economic barriers achieved by the three consecutive SPHS. In spite of the important achievements in the reduction of maternal and infant mortality rates in recent years, however, those rates are still high compared to those of other countries in the Region.

Graph N. 2

Under-5 Mortality in Bolivia, 1989-2003



Source: UDAPE/UNICEF, 2006

Table 23: SUMI's performance

Goal	Performance
Increases equity in the access to and/or utilization of health services	It has increased equity in the access to health services. Important gaps remain
Offsets social determinants that hinder the demand for health care and/or deteriorate health status	It has helped to offset poverty
Increases access to and coverage of technically appropriate health services by reducing or eliminating one or more causes of exclusion	It has increased access of previously excluded groups by reducing the economic barrier. It has increased coverage of technically appropriate health services