



Maternal and Child Health Out-of-Pocket Expenditure and Service Readiness in Lao PDR

Evidence for the National Free Maternal and Child Health Policy from a Household and Health Center Survey (2013 Update)

May 2016

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of April 25, 2016)

Currency Unit = LAK (Lao Kip)

LAK8,141 = US\$1.00

Fiscal Year=October to September

LIST OF ABBREVIATIONS

ANC	Antenatal
IPD	Inpatient
MH	Maternal health
MCH	Maternal and child health
OOP	Out-of-pocket
OPD	Outpatient
PNC	Postnatal
THE	Total health expenditure

Vice President of EAP:	Victoria Kwakwa
Country Director:	Ulrich Zachau
Sector Practice Director:	Timothy Grant Evans
Country Manager:	Sally Burningham
Sector Manager:	Toomas Palu
Primary Authors:	Ajay Tandon
	Wei Aun Yap
	Phetdara Chanthala

ACKNOWLEDGEMENTS

This policy note was updated and summarized by the World Bank's Lao PDR health team with contributions led by Ajay Tandon, Wei Aun Yap and Phetdara Chanthala, and supported by Somil Nagpal, Sutayut Osornprasop, Emiko Masaki, Laura Rose, Banthida Komphasouk, Tomo Morimoto, Eko Pambudi, Sophavanh Thitsy, Birte Sorenson, Jutta Krahn and Pema Lhazom. Boulamphan Phouthavisouk and Jattava Vongxay provided excellent support in reviewing, layout and final production of this note.

The original report was published in October 2013. This includes new updates of maternal health OOP expenditure and new child health OOP expenditure from a repeat survey conducted in 2013 in the same panel of villages and at the same time of the year as the 2010 survey. The original report can be found at:

<http://documents.worldbank.org/curated/en/2013/10/19286031/maternal-health-out-of-pocket-expenditure-service-readiness-lao-pdr-evidence-national-free-maternal-child-health-policy-household-health-center-survey>

The original report can be downloaded from:



CONTENTS

The level and equity of maternal health service utilization and financial protection remains a challenge	7
Maternal health OOP expenditure was substantial, variable, and inequitable	8
Child health services: Utilization and OOP expenditure	11
Will the national Free MCH policy help?	17
The road ahead	22

LIST OF FIGURES

Figure 1: Vaginal Delivery User Fees (2013 Update)	9
Figure 2: MH OOP Expenditure, by Quintile	10
Figure 3: Child Health OOP Expenditure per Capita	11
Figure 4: Location of Child OPD Visit	13
Figure 5: Child OPD User Fees	13
Figure 6: Location of Child IPD Episode	14
Figure 7: Child IPD User Fees	14
Figure 8: Financial Protection Afforded by the Free MCH Policy	17
Figure 9: Q-Q Plot of Free MCH Policy Benefits	18
Figure 10: Barriers Impeding Institutional Deliveries	19
Figure 11: Basic Obstetric Care Service Readiness	20
Figure 12: Utilization and Service Readiness	20
Figure 13: Financial Protection and Service Readiness	21





The level and equity of maternal health service utilization and financial protection remains a challenge

1. **Lao PDR has made notable progress in improving maternal health**, with maternal mortality decreasing from 1,600 per 100,000 births in 1990 to 220 in 2013.¹ However, in order for further gains to be realized, at least two barriers need to be addressed – the **low utilization of maternal health (MH) services** and **weak financial protection, especially among the lower wealth quintiles** – in order to improve the level and equity of maternal health.

2. **Utilization of basic MH services was extremely low** – only 38 percent of births occurred in a health facility, with wide income disparities from only 11 percent in the lowest quintile, to 87 percent in the highest quintile. Antenatal (ANC) and postnatal care (PNC) utilization was also low, with only 56 percent and 39 percent of pregnant women having received ANC and PNC respectively at least on one occasion.² Financial barriers are an important, but not the only, impediment towards the utilization of MH services as **government expenditure on health was low**, accounting for only 49 percent of total health expenditure (THE) or 1.0 percent of GDP. **Out-of-pocket (OOP) expenditures are hence very high** – amounting to 40 percent of total health expenditure (THE)³ – thus limiting the *equitable utilization* of health services (especially preventative services) and placing households at *risk of impoverishment*.

3. **In order to address these financial barriers, the Government of Lao PDR introduced a national free maternal and child health (MCH) policy.** Although there were geographic variations in the operationalization of this policy,⁴ the essence is that user fees paid OOP by pregnant women or for children under-five were replaced with case-based payments paid by or through the government or donors, for essential MCH services. In addition, small cash payments were provided to patients to cover opportunity and transport costs.

4. This report summarizes key findings from **two household, village, and health center surveys in southern and rural Lao PDR** conducted in 2010 and 2013, providing for the first time in Lao PDR, large-scale household-level data on OOP expenditure for MCH-specific services.

¹ World Development Indicators, 2013.

² Government of Lao PDR. Lao Social Indicators Survey 2011-12.

³ WHO NHA (2013).

⁴ The government is in the process of harmonizing operational procedures.

Maternal health OOP expenditure was substantial, variable, and inequitable

1. The surveys found that **OOP for an uncomplicated birth⁵ was substantial** – US\$44 or 3.4 percent of GDP per capita in 2013 – which was larger than country comparators (Table 1), although it should be noted that OOP expenditure is not a full accounting of the total expenditure on a birth, as that also includes supply-side financing received.

Table 1: Selected International Comparisons of OOP Expenditures on Delivery (2013 Update)

Country	Year	Uncomplicated Delivery (US\$)	Uncomplicated Delivery (% of GDP)
India	2012	28	1.9
Lao PDR (urban)	2010	30	2.6
Lao PDR (rural)	2010	48	4.1
Lao PDR (rural)	2013 Update	44 ⁶	3.4 ⁷
Burkina Faso	2006	6.6 - 13.3	1.7 - 3.3
Kenya	2006	4.3 - 13.5	0.7 - 2.2
Tanzania	2006	2.5 - 5.2	0.7 - 1.4
Nepal	2004	67	26



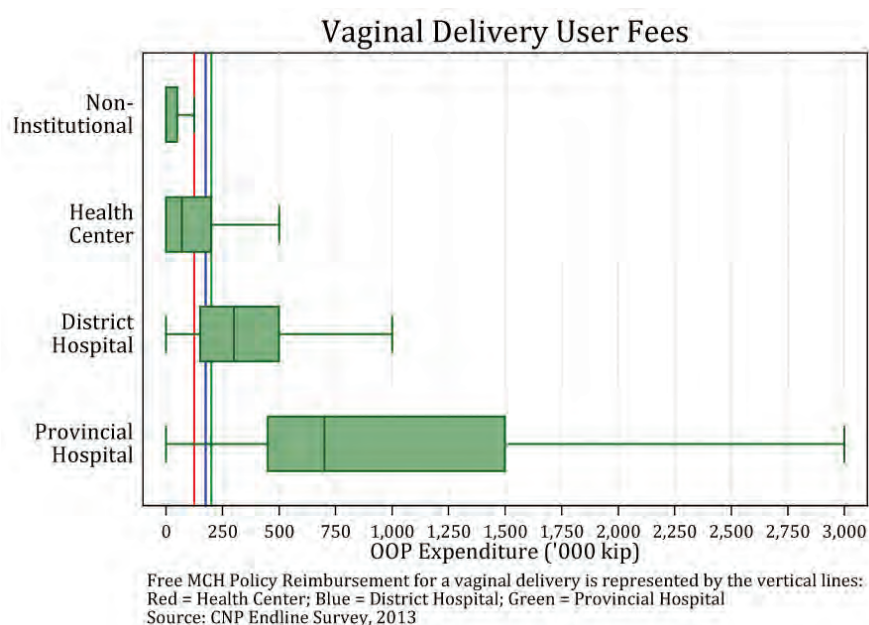
⁵ Excluding transportation and excluding ANC and PNC.

⁶ Market exchange rates.

⁷ Percent of GDP per capita (only 2012 data available at time of writing).

2. MH OOP was also variable, as although it was unsurprising for OOP expenditure to vary by choice of institutional birth vs non-institutional birth and by level of health facility, the degree of variation was large and even *within* each of these categories, there was startling variation in OOP expenditure (Figure 1). Possible reasons for the variation include clinical differences in the complexity of the delivery and also the different levels of supply-side readiness and funding, which may mean that women had to provide different amounts of demand-side financing to cover the gap. However, considering the variation was greatest at provincial hospitals where supply-side readiness was likely to be adequate, it was possible too that there could be add-on services being provided during these births resulting in variable user fees. Table 2 summarizes the mean user fee and transportation OOP expenditure for antenatal care, deliveries, and postnatal care.

Figure 1: Vaginal Delivery User Fees (2013 Update)⁸

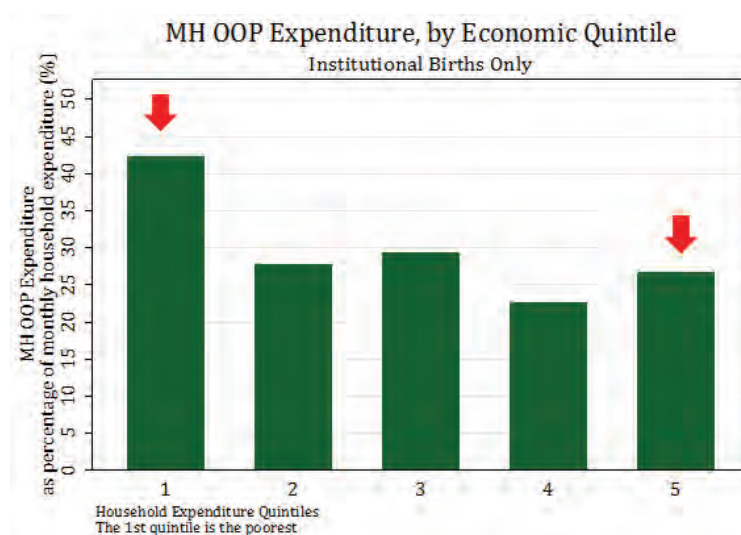


⁸ Reimbursement rates (what providers receive in lieu of charging OOP user fees) vary by facility level and delivery type. For vaginal deliveries at health centers, district hospitals, and provincial hospitals, the rate is 125,000 kip, 175,000 kip, and 200,000 kip per birth respectively.

Table 2: MH OOP Expenditure by Location (2013 Update)

Mean OOP Expenditure ('000 kip)	Health Center	District Hospital	Provincial Hospital
% of births in the sample	14.0	9.2	5.2
Antenatal Care User Fees ⁹	1.6	15.8	51.0
Vaginal Delivery User Fee	40.6	364.3	1,017.3
Postnatal Care User Fee	12.2	191.1	327.6
Antenatal Care Transportation	7.7	23.9	44.5
Vaginal Delivery Transportation	26.8	112.3	273.1
Postnatal Care Transportation	8.8	267.6	178.0
Typical total MH OOP Expenditure ¹⁰	220.6	644.4	1,602.2

3. There was inequity in MH OOP expenditure, with **the poorest quintile spending more as a percentage of monthly household expenditure on an institutional birth (43 percent) than the richest quintile (26 percent)** in 2010 (Figure 2). Given this context, it is unsurprising that that low economic status was associated with low utilization.

Figure 2: MH OOP Expenditure, by Quintile

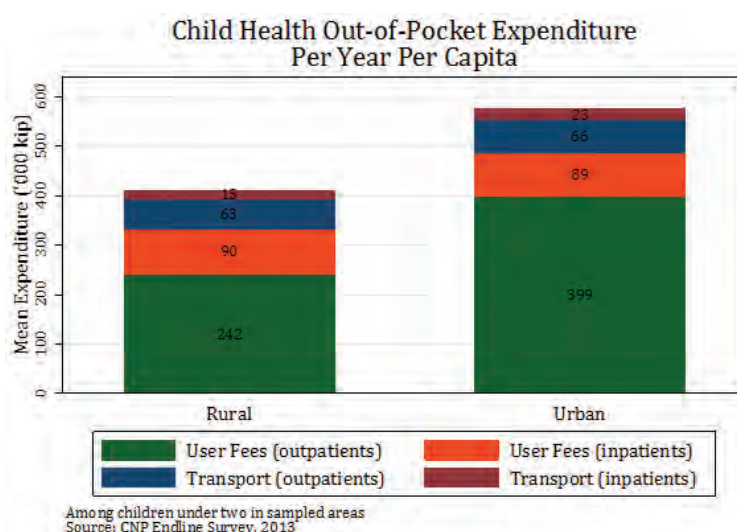
⁹ Per one antenatal care visit.

¹⁰ Including all antenatal care visit(s), delivery, and postnatal care user fees and transportation, by location of birth, as per the utilization patterns of the sample population.

Child health services: Utilization and OOP expenditure¹¹

1. Among children under-two in the sampled population, the **utilization of outpatient (OPD) services was 6.8 visits** per child per year and the **utilization of inpatient (IPD) services was 0.16 episodes** per child per year.¹² This resulted in OOP expenditure, including transportation costs, for a child under-two of 410,000 kip per child per year in rural areas and 576,000 kip in urban areas (Figure 3).¹³ On a per capita basis, outpatient OOP expenditure was higher than inpatient OOP expenditure, and user fees make up a larger proportion of the expenditure than transportation costs.

Figure 3: Child Health OOP Expenditure per Capita



¹¹ The 2013 repeat survey included additional questions on child health OOP expenditure for preventative and curative outpatient and inpatient visits, among children under-two. The latest results have been included here for reference.

¹² Note that due to the nature of the sample, these utilization rates are for children under-two (not under-five, as would be the usual age group for cross-country comparisons). Furthermore, in some areas sampled, an initiative to boost the utilization of growth monitoring visits through conditional cash transfers was in place.

¹³ Approximately US\$51 and US\$72 (market exchange rates) respectively. Total health expenditure per capita in Lao PDR is US\$37 (National Health Accounts, 2011).



2. Most child OPD visits occurred at public facilities, with health centers (63 percent) followed by district hospitals (11 percent) being the main facilities used (Figure 4). Visits to health centers generally resulted in the lowest user fee OOP expenditure (Figure 5) both compared to their private counterparts and to hospitals.

Figure 4: Location of Child OPD Visit

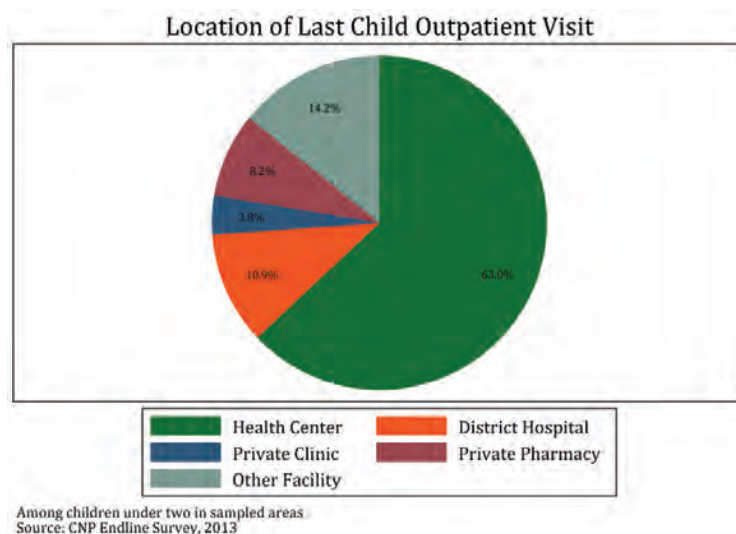
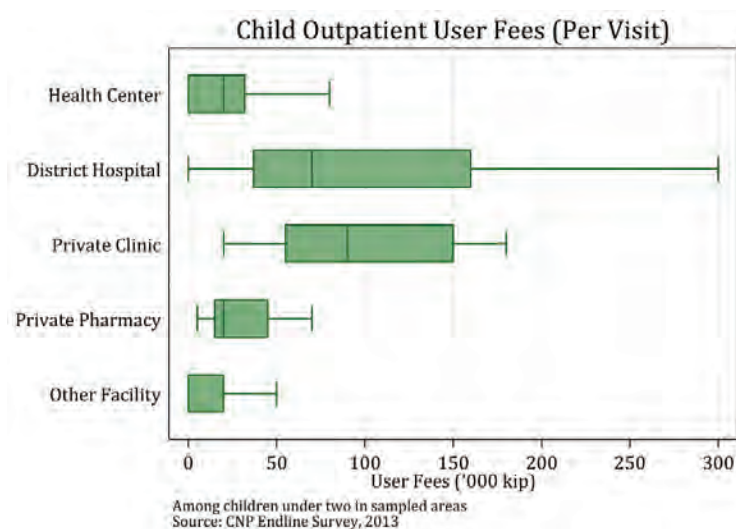


Figure 5: Child OPD User Fees¹⁴



¹⁴ Other facilities include public provincial or central hospitals; and other private facilities.

3. Almost all (95 percent) child IPD episodes occurred at public facilities - district hospitals (51 percent), health centers (23 percent), followed by provincial hospitals (21 percent) (Figure 6). At higher level facilities, user fees incurred were substantially increased and increasingly variable (Figure 7).

Figure 6: Location of Child IPD Episode

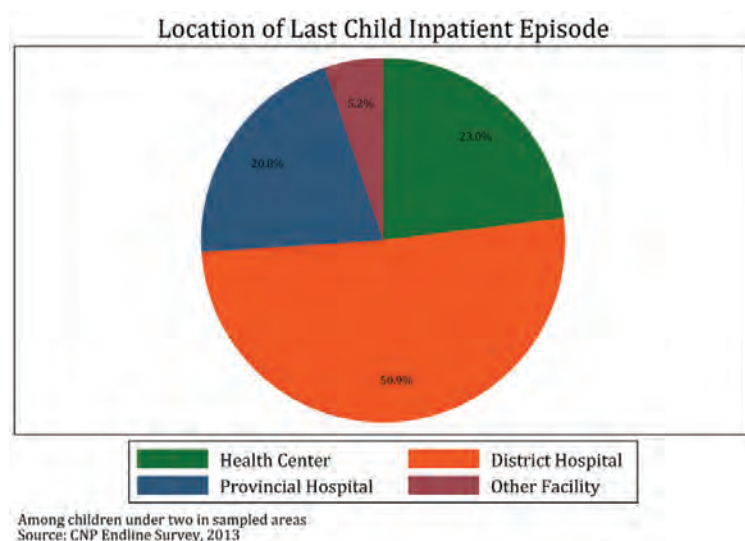
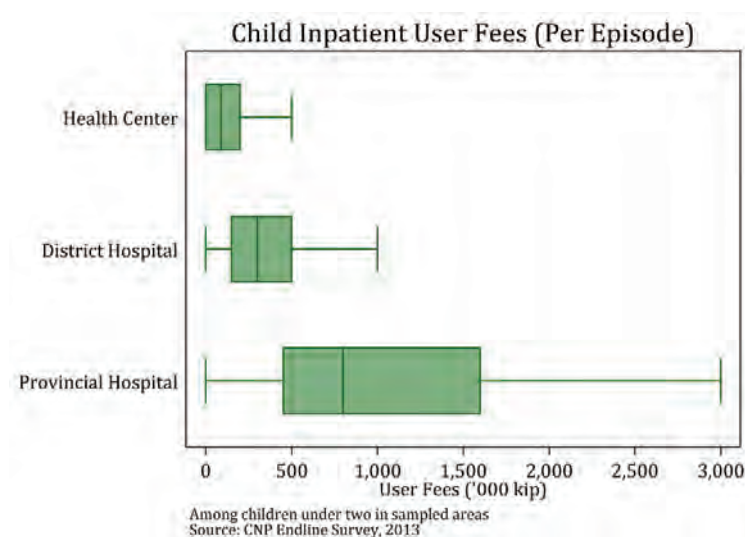


Figure 7: Child IPD User Fees



4. The free MCH policy also envisions the removal of user fees for preventative and curative child under-five OPD and IPD services at public facilities. Although the public sector is the dominant provider of services, the inclusion of accredited private sector providers, especially for OPD services, may need to be considered. Preventative services should also be emphasized and incentivized in order to reduce the burden on expensive curative care and IPD services. The unit pricing of reimbursements under the national free MCH policy may also need to be contextualized in the light of the findings on actual user fee OOP expenditure from this survey.

Additional details on the mean expenditure OOP for child health OPD and IPD services at public facilities is provided in Table 3.

Table 3: Child Inpatient and Outpatient OOP Expenditure

Mean OOP Expenditure per Visit / Episode ('000 kip)	Health Center	District Hospital	Provincial Hospital
OPD Visits at each location (%)	63	11	1
OPD User Fees	26.3 ¹⁵	106.5	1 ¹⁶
OPD Transportation	6.9	30.7	-
IPD Episodes at each Location(%)	23	51	21
IPD User Fees	112.7	443.3	1,139.8
IPD Transportation	9.0	57.3	170.9



¹⁵ Mean user fees at private clinics and private pharmacies are 103,000 kip and 33,700 kip respectively.

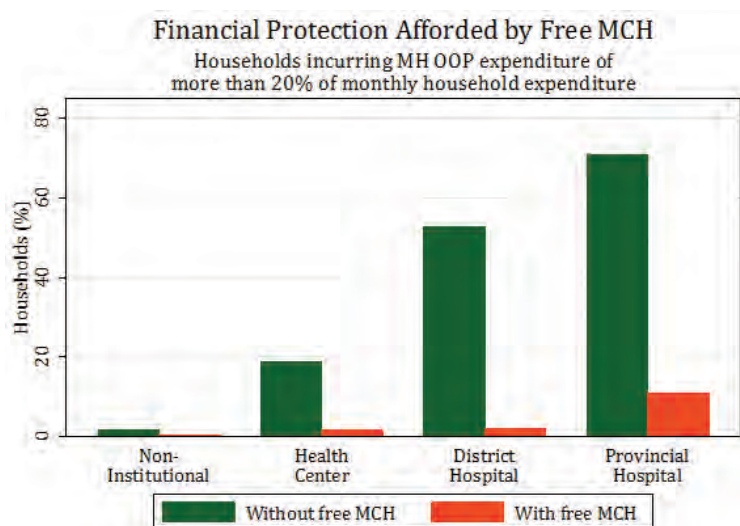
¹⁶ Too few observations.



Will the national Free MCH policy help?

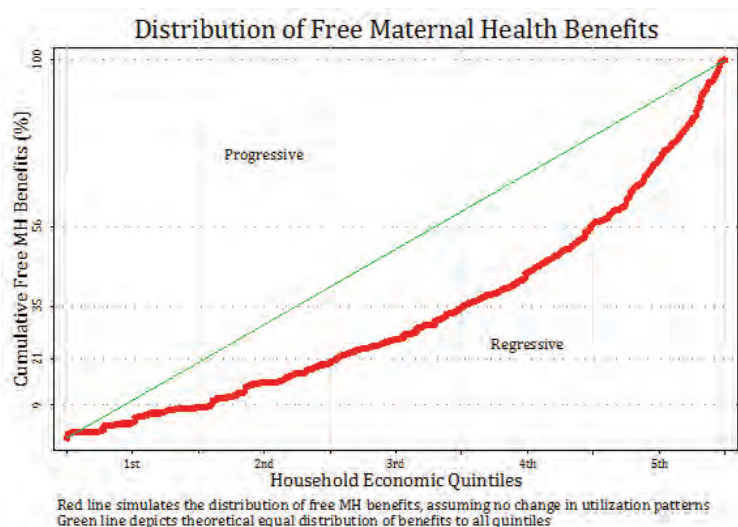
1. **The National Free MCH Policy has the potential to reduce household expenditure on MH services substantially** – for example, the percentage of households spending 20 percent or more of monthly household expenditure on MH OOP expenditure related to a birth at a district hospital, would decrease from 53 percent to 3 percent (Figure 8), had households in the sample been exempted from fees.

Figure 8: Financial Protection Afforded by the Free MCH Policy



2. However, **the policy may be regressive due to the low utilization of health services among the poorer quintiles**. Richer quintiles will capture most of the benefits of the policy as they are the main users of health services (Figure 9), unless additional efforts are taken to promote uptake of free services among the poor or if benefits are targeted to the poor.

Figure 9: Q-Q Plot of Free MCH Policy Benefits¹⁷

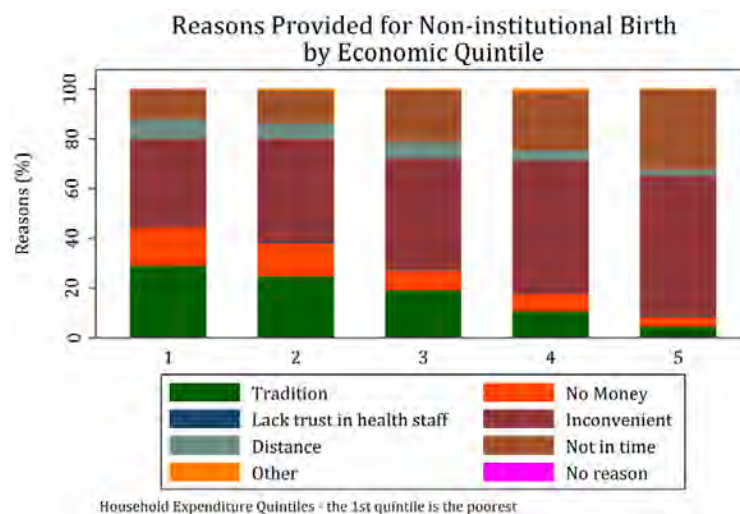


¹⁷ A Q-Q plot is one way to visualize the equity of the total distribution of benefits (y-axis) across the population (x-axis) arranged by economic status with the poorest households on the left, and the richest households on the right. If every household received the same share of benefits, the distribution would follow the green line. However, in Lao PDR, the poorest fifth of households only receive 9 percent of the benefits, compared with the richest fifth of households which receive 44 percent of the benefits.

3. Furthermore, health facilities may also face marginal decreases in revenue as per unit reimbursements of MH services are lower than the mean user fee previously obtained. This may also alter the balance of incentives in service provision between levels. However, total revenue may be increased or preserved if utilization increases (as appears to be the case from 2010 to 2013 in the survey sample).

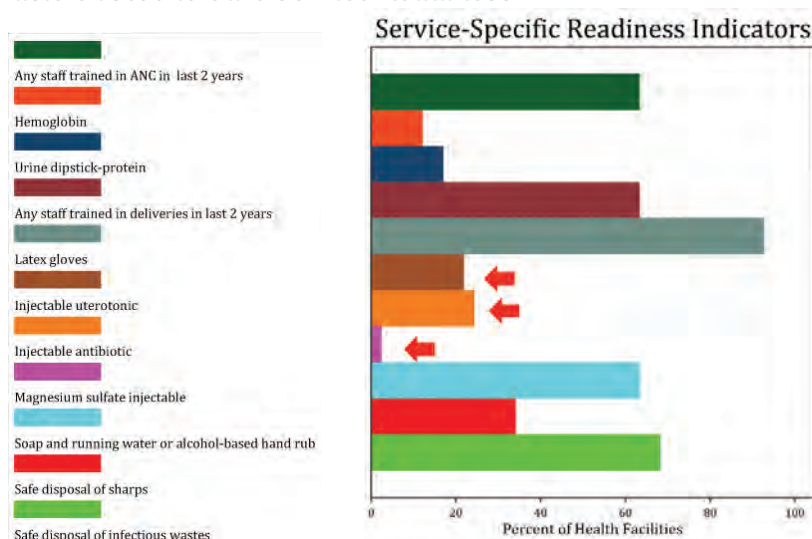
4. In addition to financial barriers, **non-financial barriers such as ethno-linguistic barriers, cultural barriers, poor education, physical access, should also be addressed** as these were also associated with low economic status and were cited more often as reasons for non-institutional births, especially among the poorer quintiles (Figure 10).

Figure 10: Barriers Impeding Institutional Deliveries



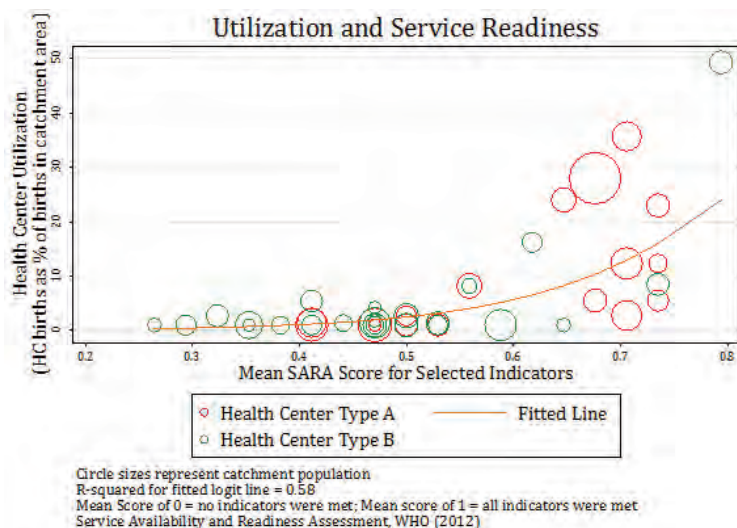
5. Supply-side factors need to be considered in any comprehensive maternal health policy. This survey of health centers found that the service readiness of facilities to provide MH services can be improved. **Few health facilities had lifesaving maternal health drugs available**, such as uterotonic drugs to treat post-partum hemorrhage, injectable antibiotics to treat infections, or magnesium sulphate to treat eclampsia or pre-eclampsia (Figure 11). Without these commodities, even if deliveries were to occur at a health center, improvements in health outcomes may not be achieved.

Figure 11: Basic Obstetric Care Service Readiness



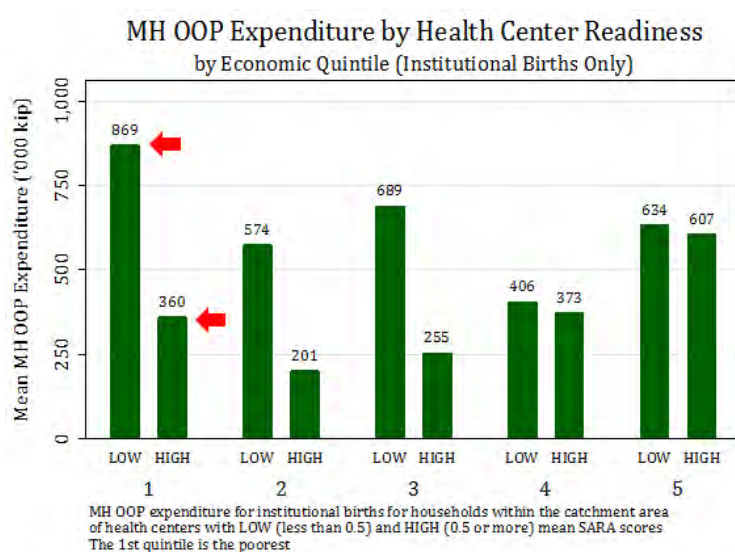
6. Also, considering that the free MCH policy was conceptualized to increase utilization by lowering financial barriers, it is relevant to note that in the health centers surveyed **utilization is positively associated with readiness** – with substantial uptake in health center births with high service readiness compared with health centers with low service readiness (Figure 12).

Figure 12: Utilization and Service Readiness



7. In addition to increased utilization, **poor households within the catchment area of high service readiness health centers appeared to have benefited from enhanced financial protection** – with substantially lower OOP expenditure for institutional births compared with equivalent households in the catchment area of health centers with low service readiness (Figure 13). Improved supply-side service readiness by itself hence is already associated with many of the key goals – increasing utilization and financial protection – of the national free MCH policy.

Figure 13: Financial Protection and Service Readiness



The road ahead

1. As the free MCH policy is expanded geographically in Lao PDR, although the findings from the survey are broadly supportive of the government's initiative, several potential policy implications are highlighted:
2. **Review and adapt the pricing and case-definition of services regularly** in order to prevent inappropriate incentives caused by pricing differentials and to encourage service delivery at the appropriate health facility level, appropriate referral of complicated cases to higher level facilities, non-referral of cases appropriately managed at the current level, and neutral financial incentives with regard to the need for caesarean section births.
3. **Promote uptake of services among the lower socioeconomic groups** through socializing campaigns and programs, and the sensitization of facilities and providers to the health seeking expectations of lower socioeconomic households. Targeting of the policy benefits may also be considered once the program is more established and low utilization is less of a consideration.
4. **Address non-financial barriers** such as ethno-linguistic barriers, cultural barriers, poor education, and physical access in order to improve the equity and level of MCH service utilization.
5. **Invest in the supply-side service readiness** of facilities and staff, especially with regard to consumables such as essential drugs. These supply-side costs need to be considered as there may be limited value in patients utilizing services which a health facility is unable to deliver adequately.
6. **Establish strong and transparent monitoring and community accountability systems**, and preferably, integrate these systems into a strengthened health information system, in order to provide clear information and evidence, to the government to inform on-going incremental improvements which will be required as the program evolves, while ensuring that service delivery is responsive and accountable to community clients.
7. **Strengthen referral mechanisms** between primary and secondary care facilities in order to promote safe, efficient, and appropriate transfers of patients between facility levels.



WORLD BANK GROUP

The World Bank Lao PDR
Patouxay Nehru Road
P.O Box: 345
Vientiane, Lao PDR
Tel : (856-21) 266 200
Fax : (856-21) 266 299
Website: www.worldbank.org/lao

The World Bank
1818 H Street, NW
Washington, D.C. 20433, USA
Tel: (202) 4731000
Fax: (202) 4776391
Website: www.worldbank.org